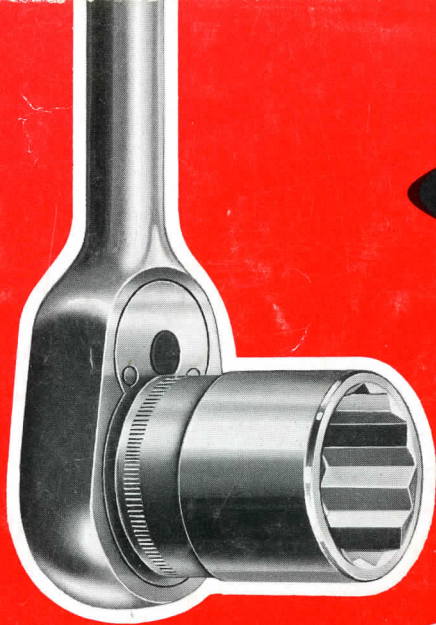


BRITool



MADE IN BRITool ENGLAND

chrome alloy steel service tools
catalogue



This catalogue cancels all previous editions and constitutes the standard range of BRITool products in current production.

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METRIC**

Details of the ISO Metric bolt and hexagon sizes adopted for use in the United Kingdom, and which fall within the range of this catalogue, are given on page 87.

To aid identification, ALL WRENCH SETS WHICH CONSIST OF ISO METRIC SPANNER SIZES **ONLY** ARE PRINTED THUS **2467B**

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Telephone No.: 0902-731281
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PES600	65	PGH2000	68	PSB2	28	6RBM1617	37	RJM13	49
PES625	65	PGH2050	68	PSB3	28	6RBM1719	37	RJM14	49
PES687	65	PGH2187	68	PSB4	28	9RBM1819	37	RJM15	49
PES710	65	PGH2220	68	1PZD	28			RJM16	49
PES750	65	PGH2250	68	2PZD	28	9RBM67	39	RJM17	49
PES812	65	PGH2312	68	3PZD	28	9RBM78	39	RJM18	49
PES820	65	PGH2375	68	4PZD	28	9RBM89	39	RJM19	49
PES875	65	PGH2410	68			9RBM810	39	RJM20	49
PES920	65	PGH2500	68	P8-92-A	69	9RBM1011	39	RJM21	49
PES937	65	PGH2625	68	P8-92-D	69	9RBM1113	39	RJM22	49
		PGH2750	68	P8-92-093	69	9RBM1213	39	RJM23	49
		PGH2937	68	P8-92-125	69	9RBM1317	39	RJM24	49
PESM9	65	PGH3125	68	P8-92-156	69	9RBM1415	39	RJM25	49
PESM10	65	PGH3150	68	P8-92-187	69	9RBM1617	39	RJM26	49
PESM11	65								

Tool No.	Page No.	Tool No.	Page No.	Tool No.	Page No.	Tool No.	Page No.	Tool No.	Page No.
RJM27	49	94A Set	19	415/8	72	2447B Set	45	3020/E	83
RJM28	49	95B Set	19	417/4	72	2451B Set	38	3021	81
RJM30	49	96B Set	19	417/6	72	2452B Set	38	3022	81
RJM32	49	96C Set	19	417/8	72	2453B Set	38	3023	85
RJM36	49	97B Set	19	417/10	72	2454B Set	38	3024	85
RJM41	49	98B Set	19	417/12	72	2455B Set	38		
				419	72	2456B Set	38	3150	74
RJQ250	49	100B Set	20	421	72	2458B Set	38	3151	74
RJQ312	49	101B Set	20	422/6	72	2459B Set	38	3152	74
RJQ375	49	102B Set	20	422/8	72	2460B Set	46		
RJQ437	49	103B Set	20	422/12	72	2461B Set	46	4004	40
RJQ500	49	105B Set	21	423/P1	72	2462B Set	46	4007	40
		106B Set	21	423/P2	72	2463B Set	46	4011	40
RK/A45	78	107B Set	21	423/P3	72	2464B Set	46	4015	40
RK/A74	78	108B Set	21	423/P4	72	2465B Set	46	4020	40
RK/D74	78	109B Set	18	424/P1	72	2466B Set	46	4024	40
RK/E73	78			424/P2	72	2467B Set	46		
RK/E74	78	110B Set	18	425/1	72	2468B Set	46	4226	39
RK/H73	78	111B Set	18	425/2	72	2469B Set	46	4227	39
RK/H74	78	112B Set	18	425/3	72	2470 Set	50	4229	38
RK/304	77	113B Set	18	425/4	72	2471 Set	50	4230	39
RK/304C	77			426/1	72	2472 Set	50	4231	39
RK/306	77	114 Set	8	426/2	72	2473 Set	50	4232	38
RK/306C	77	116 Set	8	446C Set	35	2474 Set	50	4233	39
RK/308	77			447D Set	34	2475 Set	50	4234	39
RK/308C	77	123A Set	13	497C Set	32	2476 Set	50	4235	38
RK/310	77	124A Set	13	498C Set	33	2477 Set	50	4236	38
RK/310C	77	125A Set	13	499C Set	33	2478 Set	50	4237	39
RK/312	77	126A Set	18			2479 Set	50	4238	38
RK/312C	77	127A Set	18	555	78	2486 Set	43	4240	38
RK/315	77	128A Set	18	556	78	2487 Set	43	4241	39
RK/318	77			567	32	2489 Set	43	4245	39
		140C Set	20	569	35	2490 Set	43	4246	38
SB3344	51	141B Set	20	578	74	2491C Set	12	4250	38
SB3743	51	143D Set	20			2492C Set	18	4260	38
SB5056	51	144A Set	20	683/8	73	2496B Set	12		
SB5260	51	145C Set	21	683/12	73	2498B Set	12	4301	41
SB6268	51	146A Set	21	683/8H	73	2499B Set	18	4302	41
SB7182	51			683/12H	73			4305	41
SB7587	51	151 Set	71			2500 Set	37	4307	41
SB8193	51			875/3L	74	2501R Set	37	4313	41
SB92101	51	174 Set	26	875/4L	74	2502 Set	37	4315	41
		175 Set	26	875/5L	74	2503R Set	37		
		176 Set	26			2504 Set	37	4317	41
SBM89	51			900	36	2505 Set	37	4320	41
SBM1011	51			901	36	2506R Set	37	4324	41
SBM1213	51	195	75			2530R Set	51	4325	41
SBM1415	51			1077	76	2531R Set	51	4326	41
SBM1617	51	204	75			2532R Set	51	4328	41
SBM1819	51	212	76	1580A	52	2533R Set	51	4329	41
SBM2022	51	216	76	1580C	52			4334	41
SBM2123	51	217	76	1581	52	2630R Set	49	4336	41
SBM2427	51	219	74	1582	52	2631B Set	49		
		220	75	1583	52	2632B Set	49	4500	40
50A Set	24	221	75	1584	52	2633R Set	49	4501	40
51A Set	24	222	76	1585	52	2634B Set	49	4502	40
52A Set	24	225	75	1586	52	2635B Set	49	4503	40
53A Set	24	226	75	1587	52	2636B Set	49	4505	40
55A Set	24	240 Set	30	1588	52	2637B Set	49	4507	40
56A Set	24	241 Set	30	1589	52	2638B Set	49	4510	40
57A Set	24	242 Set	30			2639B Set	49	4513	40
58A Set	24	243 Set	30	2350 Set	29	2640B Set	49	4515	40
59B Set	24	244 Set	31	2351 Set	29	2641B Set	49	4517	40
		245 Set	31	2352 Set	29	2642B Set	49	4520	40
60 Set	8	246 Set	31	2353 Set	29	2643B Set	49	4525	40
63 Set	8			2354 Set	29			4528	40
64 Set	8	304	77	2355 Set	29			4530	40
65 Set	8	304C	77			2770	84	4536	40
69 Set	8	306	77	2406B Set	40	2771	84		
		306C	77	2407B Set	40	2785	84	4703	41
77A Set	13	308	77	2410 Set	42	2789	85	4707	41
79B Set	13	308C	77	2411 Set	42	2792	84	4709	41
		310	77	2412 Set	42	2793	84	4712	41
80A Set	13	310C	77	2416 Set	74	2794	84	4715	41
81A Set	13	312	77	2418B Set	38				
82A Set	13	312C	77	2421B Set	38			8000	61
83A Set	12	315	77	2422B Set	38	3000	74	8104	73
84A Set	12	318	77	2425B Set	45	3010A	79		
85A Set	12	384	53	2426B Set	45	3011A	79		
86A Set	12	386	53	2427B Set	45	3012A	79		
86B Set	12	390/3	53	2428B Set	45	3013A	79		
87B Set	12	391/3	53	2429B Set	45	3014A	79		
88B Set	12	392	52	2440B Set	44	3015A	79		
		393	52	2441B Set	44	3016	79		
90A Set	19			2442B Set	45	3020	83		
91A Set	19	415/4	72	2446B Set	44	3020/A	83		
93B Set	19	415/6	72						

1/4"

BRITISH AND AMERICAN SIZES—BISQUARE

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		B.A.	U.N.F.	in.	mm.	in.	mm.	oz.	g.
DQ250	1/4	6,5	4	.474	12,04	.875	22,2	5	142
DQ312	3/16	4,3	6	.544	13,82	.875	22,2	6	170
DQ375	1/8	2	10	.658	16,71	.875	22,2	8 1/2	241

BRITISH SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		Whit.	B.A.	in.	mm.	in.	mm.	oz.	g.
DH152	.152	—	8	.299	7,59	All -.875	22,2	4 1/2	127
DH172	.172	—	7	.315	8,00			4 1/2	127
DH193	.193	—	6	.315	8,00			4 1/2	127
DH220	.220	—	5	.355	9,02			4 1/2	127
DH248	.248	—	4	.390	9,91			4 1/2	127
DH282	.282	—	3	.432	10,97			6	170
DH324	.324	—	2	.474	12,04			6	170
DH338	.338	1/8	—	.500	12,70			6	170
DH365	.365	—	1	.544	13,82			7	198
DH413	.413	—	0	.607	15,42			7	198
DH445	.445	3/16	—	.625	15,87			7	198

1/4" SQUARE DRIVE "DWARF"
**SOCKETS—HEXAGON,
 BIHEXAGON &
 BISQUARE**

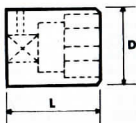
UNIFIED AND AMERICAN SIZES—HEXAGON AND BIHEXAGON

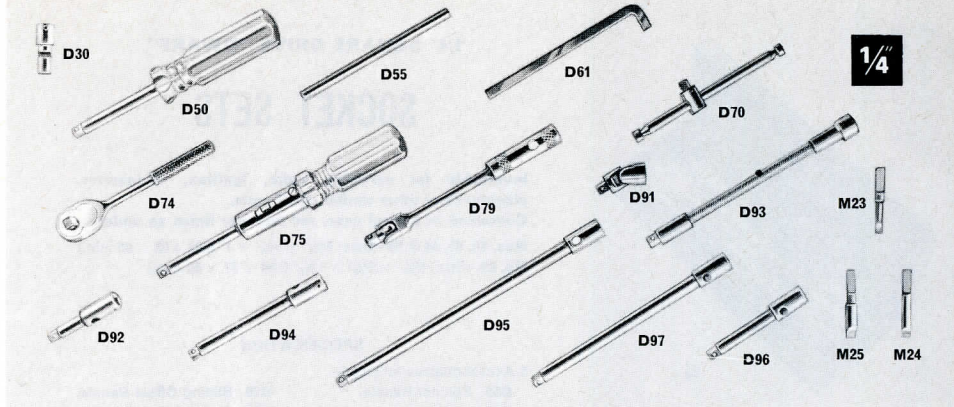
HEXAGON	BIHEXAGON	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
No.	No.		S.A.E.	UNIFIED		in.	mm.	in.	mm.	oz.	g.
				Bolt dia. and Series	Nut Size and Series						
DH187	—	3/16	—	4M	4MP	.315	8,00	All -875	22,2	4 1/2	127
DH219	—	1/32	—	—	—	.355	9,02			4 1/2	127
DH234	—	15/64	—	—	—	.375	9,52			4 1/2	127
DH250	—	1/4	—	6 & 8M	4Mp 6MP	.390	9,91			4 1/2	127
DH266	—	17/64	—	—	—	.405	10,29			4 1/2	127
DH281	—	9/32	—	—	—	.432	10,97			6	170
DH312	DB312	5/16	—	10M	6Mp 8MP	.474	12,04			6	170
DH344	DB344	11/32	—	—	8MP 10MP	.500	12,70			6	170
DH375	DB375	3/8	—	—	10MP	.544	13,82			6	170
DH437	DB437	7/16	1/4	1/4N	1/4N	.625	15,87			7	198
DH500	DB500	1/2	3/8	5/8N	5/8N	.718	18,24			9 1/2	269

Made from Chrome Alloy Steel.
 Bright nickel and chrome plated finish to
 B.S. 1224: 1970, service condition No. 1.
 Dimensions conform to B.S.4006: 1966.
 Ball retaining hole.

METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	oz.	g.
DHM4	4	.271	6,88	All -.875	22,2	4	113
DHM4,5	4,5	.292	7,42			4	113
DHM5	5	.318	8,08			4	113
DHM5,5	5,5	.344	8,74			4	113
DHM6	6	.371	9,42			4	113
DHM7	7	.423	10,74			4	113
DHM8	8	.474	12,04			4	113
DHM9	9	.525	13,33			5 1/2	156
DHM10	10	.576	14,63			7	198
DHM11	11	.627	15,92			7	198
DHM12	12	.680	17,27			8 1/2	241
DHM13	13	.732	18,59			10	283
DHM14	14	.781	19,84			11	312
DHM15	15	.817	20,75			11	312





"DWARF" SOCKET ACCESSORIES

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

SCREWDRIVER BITS (Use with D30)

Hollow ground ends. Overall length $1\frac{3}{4}$ " (44 mm.)

No.	Tip Size		Weight Each	
	in.	mm.	oz.	g.
M23	$.032 \times \frac{3}{16}$	$0,81 \times 4,75$	$\frac{1}{4}$	7
M24	$.032 \times \frac{1}{4}$	$0,81 \times 6,35$	$\frac{1}{4}$	7
M25	$.042 \times \frac{1}{4}$	$1,07 \times 7,92$	$\frac{1}{2}$	14

BIT HOLDER

No. D30

One end fits square drive and the other accepts any of the screwdriver bits M23-M25 shown above. Overall length $1\frac{1}{4}$ " (32 mm.)

Length with bit assembled $2\frac{1}{4}$ " (57 mm.)

Weight $\frac{1}{2}$ oz. each.
14 g.

SPINNER HANDLE

No. D50

For spinning nuts rapidly. Can be used with all extensions and sockets. Transparent amber colour shockproof handle.

Length 6" (152 mm.)

Weight $2\frac{3}{4}$ oz. each.
78 g.

BAR HANDLE

No. D55

Size $\frac{1}{4} \times 4\frac{1}{2}$ " ($6,35 \times 114$ mm.)

Weight 1 oz. each.
28 g.

"L" HANDLE

No. D61

Made from highest quality carbon steel. Ball location at each end.

Length $4\frac{1}{2}$ " (114 mm.) Offset $\frac{1}{16}$ " (14 mm.)

Weight $1\frac{1}{2}$ oz. each.
42 g.

SLIDING OFFSET HANDLE

No. D70

Has retained sliding bar enabling adaptor to be used with varying leverage or operated in a restricted space.

Bar size $\frac{3}{16}$ " $\times$ $4\frac{1}{2}$ ".

Weight 2 oz. each.
57 g.

RATCHET HANDLE

No. D74

Instantly reversible by thumb lever without removing the socket. All parts totally enclosed. Length $4\frac{5}{8}$ " (117 mm.) 20 teeth. Spare parts available, see page 78.

Weight 3 oz. each.
85 g.

SPINNER RATCHET

No. D75

Will operate right or left-hand, or may be locked solid. Transparent amber colour shockproof handle.

Length $7\frac{1}{4}$ " (184 mm.)

Weight $5\frac{1}{2}$ oz. each.
156 g.

SWIVEL HANDLE

No. D79

With hinged link permitting operation at varying angles. Drilled for bar handle D55.

Length $5\frac{1}{4}$ " (146 mm.)

Weight $3\frac{1}{2}$ oz. each.
99 g.

UNIVERSAL JOINT

No. D91

Can be used in any position in an assembly. Short coupled.

Length $1\frac{1}{16}$ " (33 mm.)

Weight 1 oz. each.
28 g.

FLEXIBLE EXTENSION

No. D93

For reaching difficult positions. The flexible steel cable shaft is suitable for right or left hand drive. Cable shaft has red painted finish.

Length 6" (152 mm.)

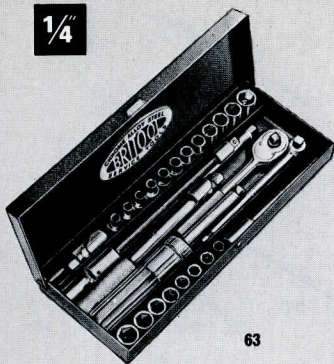
Weight 2 oz. each.
57 g.

EXTENSIONS

May be used in conjunction with all parts or together where longer reach is required. Drilled for bar handle D55. Square socket in head.

No.	Length		Shank Dia.		Weight Each	
	in.	mm.	in.	mm.	oz.	g.
D92	2	51	$\frac{3}{8}$	9,52	1	28
D96	3	76	$\frac{3}{8}$	9,52	$1\frac{1}{2}$	42
D94	4	102	$\frac{3}{8}$	9,52	2	57
D97	6	152	$\frac{3}{8}$	9,52	3	85
D95	8	203	$\frac{3}{8}$	9,52	4	113

1/4"



63

1/4" SQUARE DRIVE "DWARF"

SOCKET SETS

Invaluable for servicing radio, ignition, refrigerator, electrical and other similar small units.

Contained in a steel case, red hammer finish as under:—

Nos. 60, 63, 64 & 65—Size: $8\frac{3}{4}" \times 3\frac{1}{4}" \times 1"$ (222 $\times$ 82 $\times$ 25 mm.)

No. 69—Size: $6\frac{5}{8}" \times 2\frac{1}{4}" \times 1\frac{1}{8}"$ (168 $\times$ 57 $\times$ 30 mm.)

SPECIFICATION

5 Accessories as follows:—

D50 Spinner Handle.

D70 Sliding Offset Handle.

D95 8" Extension.

D93 Flexible Extension.

D94 4" Extension

SET No. 64

5 Accessories as specified. 9 Hexagon Sockets B.A. sizes: 0, 1, 2, 3, 4, 5, 6, 7, 8

Weight 2 lb. 8 oz. per set.
1134 g.

SET No. 65

5 Accessories as specified. 10 Hexagon Sockets.

American sizes: $\frac{1}{16}"$, $\frac{1}{32}"$, $\frac{1}{64}"$, $\frac{1}{4}"$, $\frac{1}{8}"$, $\frac{1}{32}"$, $\frac{3}{16}"$, $\frac{1}{32}"$, $\frac{3}{8}"$, $\frac{1}{16}"$ Across Flats.

Weight 2 lb. 8 oz. per set.
1134 g.

SET No. 63

8 Accessories as follows:—

D50 Spinner Handle.

D70 Sliding Offset Handle.

D74 Ratchet Handle.

D79 Swivel Handle.

D93 Flexible Extension.

D94 4" Extension.

D91 Universal Joint.
D95 8" Extension.

20 Hexagon Sockets.

B.A. sizes: 0, 1, 2, 3, 4, 5, 6, 7, 8. Whitworth size: $\frac{1}{16}"$.

American sizes: $\frac{3}{16}"$, $\frac{1}{32}"$, $\frac{1}{64}"$, $\frac{1}{4}"$, $\frac{1}{8}"$, $\frac{1}{32}"$, $\frac{3}{16}"$, $\frac{1}{32}"$, $\frac{3}{8}"$, $\frac{1}{16}"$ Across Flats.

Weight 3 lb. 4 oz. per set.
1474 g.

SET No. 69

3 Accessories as follows:— D74 Ratchet Handle. D79 Swivel Handle. D55 Bar Handle.

8 Hexagon Sockets American sizes: $\frac{3}{16}"$, $\frac{1}{32}"$, $\frac{1}{64}"$, $\frac{1}{4}"$, $\frac{1}{8}"$, $\frac{1}{32}"$, $\frac{3}{16}"$, $\frac{1}{32}"$, $\frac{3}{8}"$, $\frac{1}{16}"$ Across Flats.

3 Bisquare Sockets: $\frac{1}{4}"$, $\frac{3}{16}"$, $\frac{3}{8}"$ Across Flats.

Weight 1 lb. 9 oz. per set.
709 g.

SET No. 60

3 Accessories as follows:— D50 Spinner Handle. D70 Sliding Offset Handle. D94 4" Extension.

14 Hexagon Sockets. Metric sizes: 4-4.5-5-5.5-6-7-8-9-10-11-12-13-14-15 mm.

Weight 2 lb. 5 oz. per set.
1049 g.

BASIC SOCKET SETS

These sets make good basic kits which can be added to as desired or included in larger sets.

Contained in a red enamelled steel case.

Size: $3\frac{3}{4}" \times 1\frac{1}{8}" \times \frac{3}{4}"$ (95 $\times$ 35 $\times$ 19 mm.)

SET No. 114 contains D61 Offset Handle.

7 Hexagon Sockets. B.A. sizes: 0, 1, 2, 3, 4, 6, 8.

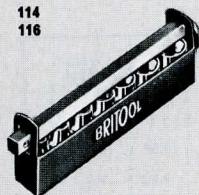
Weight 7 oz. per set.
198 g.

SET No. 116 contains D61 Offset Handle. 7 Hexagon Sockets

American sizes: $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{3}{16}"$, $\frac{1}{32}"$, $\frac{3}{8}"$, $\frac{1}{16}"$, $\frac{1}{2}"$ Across Flats

Weight 7 oz. per set.
198 g.

114
116



Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.
Ball retaining groove on each face of square drive.

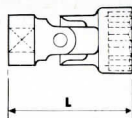
3/8" SQUARE DRIVE

3/8"

BRITISH SIZES—UNIVERSAL JOINT BIHEXAGON

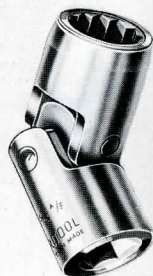
No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		Whit.	B.S.	in.	mm.	in.	mm.	lb. oz.	g.
AU445	.445	3/16	1/4	.656	16,66	1.531	38,9	13	368
AU525	.525	1/4	3/8	.750	19,05	1.812	46,0	1 3	539
AU600	.600	5/16	3/4	.812	20,62	1.812	46,0	1 6	624
AU710	.710	3/8	7/8	.968	24,59	1.906	48,4	1 7	652

"AERO" SOCKETS



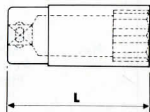
UNIFIED & AMERICAN SIZES—UNIVERSAL JOINT BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	lb. oz.	g.
			Bolt dia. & Series	Nut size & Series						
AU375	3/8	—	—	10Mp	.562	14,27	1.531	38,9	11	312
AU437	1/2	1/4	1/4N	1/4N	.656	16,66	1.531	38,9	13	368
AU500	5/8	5/16	5/16N	5/16N	.718	18,24	1.531	38,9	1 0	454
AU562	3/4	3/8	3/8N	3/8N	.781	19,84	1.875	47,6	1 3	539
AU625	7/8	7/16	7/16N	—	.875	22,22	1.906	48,4	1 5	596
AU687	1 1/16	1/2	1/2N	1/2N	.937	23,80	1.906	48,4	1 6	624
AU750	1 3/4	1 1/2	1 1/2N	1 1/2N	1.000	25,40	1.906	48,4	1 7	652



BRITISH SIZES—DEEP BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		Whit.	B.S.	in.	mm.	in.	mm.	lb. oz.	g.
AD445	.445	3/16	1/4	.642	16,31	1 3/4	44,4	14	397
AD525	.525	1/4	3/8	.742	18,85	2	50,8	1 4	567
AD600	.600	5/16	3/8	.836	21,23	2 1/4	57,1	1 12	794
AD710	.710	3/8	7/8	.974	24,74	2 1/2	63,5	2 9	1162
AD820	.820	7/8	1 1/2	1.110	28,19	2 5/8	66,7	3 11	1673



NOT RECOMMENDED FOR USE ON 'U' BOLTS.

UNIFIED AND AMERICAN SIZES—DEEP BIHEXAGON

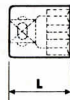
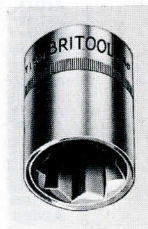
For set of deep sockets see page 12.

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	lb. oz.	g.
			Bolt dia. & Series	Nut size & Series						
AD375	3/8	—	—	10Mp	.555	14,10	1 3/4	44,4	11	312
AD437	1/2	1/4	1/4N	1/4N	.633	16,08	1 3/4	44,4	13	368
AD500	5/8	5/16	5/16N	5/16N	.711	18,06	2	50,8	1 3	539
AD562	3/4	3/8	3/8N	3/8N	.789	20,04	2	50,8	1 7	652
AD594	7/8	7/16	7/16N	—	.828	21,03	2	50,8	1 7	652
AD625	1 1/8	1/2	1/2N	—	.869	22,07	2 1/4	57,1	1 12	794
AD687	1 1/16	5/8	5/8N	—	.946	24,02	2 1/2	63,5	2 9	1162
AD750	1 3/4	1 1/2	1 1/2N	1 1/2N	1.024	26,01	2 1/2	63,5	2 11	1219
AD812	1 5/8	1 1/4	1 1/4N	1 1/4N	1.101	27,96	2 5/8	66,7	3 13	1729
*ADH812	1 5/8	—	—	—	1.063	27,00	2.64	67,0	3 4	1474

*Special socket for 14 mm. Sparking Plugs. **Boxed quantity—10** Similar to EDH812 listed on page 16.

BISQUARE SIZES—NORMAL DEPTH

No.	A Nominal Size Across Flats in.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	oz.	g.
AQ250	1/4	.480	12,19	.906	23,0	5	142
AQ312	3/8	.568	14,27	.906	23,0	6	170
AQ375	1/2	.656	16,66	.968	24,6	7	198
AQ437	5/8	.750	19,05	1.000	25,4	11	312
AQ500	3/4	.843	21,41	1.000	25,4	14	397



3/8

3/8" SQUARE DRIVE

"AERO" SOCKETS

Made from Chrome Alloy Steel.
Bright nickel and chrome plated finish to
B.S. 1224: 1970, service condition No. 1.
Dimensions conform to B.S.4006: 1966.

BRITISH SIZES—BIHEXAGON



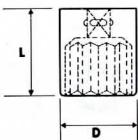
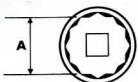
No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Boxed Quantity	Weight Boxed		
		Whit.	B.S.	B.A.	in.	mm.	in.	mm.		lb.	oz.	g.
AB324	.324	—	—	2	.490	12,45	.906	23,0	5	4	113	
AB338	.338	1/8	—	—	.509	12,93	.906	23,0	5	4 1/2	127	
AB365	.365	—	—	—	.541	13,74	.906	23,0	5	4 1/2	127	
AB413	.413	—	—	0	.601	15,26	.906	23,0	5	4 1/2	127	
AB445	.445	3/16	1/4	—	.642	16,31	.906	23,0	5	5	142	
AB445	.525	3/16	5/16	—	.742	18,85	.906	23,0	5	6	170	
AB525	.600	1/4	3/8	—	.836	21,23	1.000	25,4	5	7	198	
AB600	.710	3/8	7/16	—	.974	24,74	1.062	27,0	5	12	340	
AB710	.820	7/16	1/2	—	1.110	28,19	1.187	30,2	5	15	425	

UNIFIED AND AMERICAN SIZES—HEXAGON AND BIHEXAGON

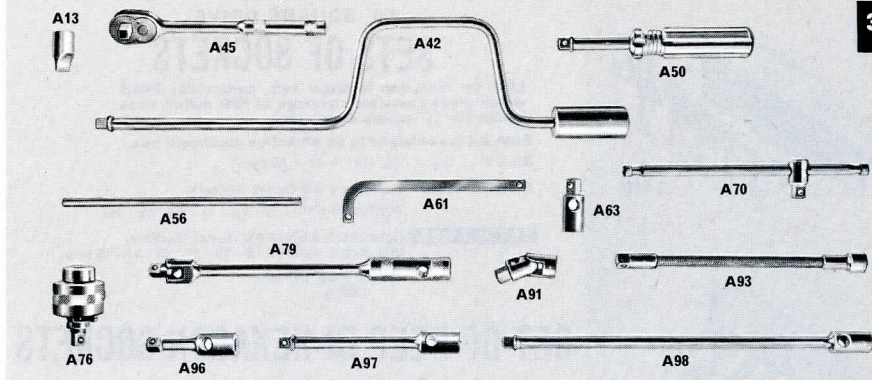
No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		S.A.E.	UNIFIED							lb. oz.	g.
			Bolt dia. and Series	Nut size and Series	in.	mm.	in.	mm.			
AH187	3/16	—	4M	4MP	.323	8,20	.906	23,0	5	4 1/2	127
AH250	1/4	—	6 & 8M	4Mp 6MP	.401	10,18	.906	23,0	5	4 1/2	127
AB312	5/16	—	10M	6Mp 8MP	.477	12,11	.906	23,0	10	7 1/2	213
AB344	11/32	—	—	8Mp 10MP	.517	13,13	.906	23,0	5	4 1/2	127
AB375	3/8	—	—	10MP	.555	14,10	.906	23,0	10	9	255
AB437	7/8	1/4	1/4N	1/4N	.633	16,08	.906	23,0	10	9	255
AB469	15/32	—	—	—	.673	17,09	.906	23,0	5	4 1/2	127
AB500	1/2	3/16	3/16N	3/16N	.711	18,06	.906	23,0	10	9	255
AB531	17/32	—	—	—	.750	19,05	.906	23,0	5	5 1/2	156
AB562	9/16	3/8	3/8N	3/8N	.789	20,04	.968	24,6	10	12	340
AB594	19/32	—	—	—	.828	21,03	1.000	25,4	10	15	425
AB625	5/8	7/16	7/16N	—	.869	22,07	1.000	25,4	10	1	3
AB687	11/16	—	—	7/16N	.946	24,02	1.062	27,0	10	1	7
AB750	3/4	1/2	1/2N	1/2N	1.024	26,01	1.062	27,0	10	1	7
AB812	13/16	—	5/8N	5/8N	1.101	27,96	1.187	30,2	5	15	425

METRIC SIZES—HEXAGON AND BIHEXAGON

Ball retaining groove on
each face of square drive.



No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		in.	mm.	in.	mm.		oz.	g.
AHM7	7	.429	10,90	.922	23,4	5	4 1/2	127
AHM8	8	.482	12,24	.922	23,4	5	4 1/2	127
ABM9	9	.531	13,49	.906	23,0	5	4 1/2	127
ABM10	10	.580	14,73	.906	23,0	5	4 1/2	127
ABM11	11	.628	15,95	.906	23,0	5	4 1/2	127
ABM12	12	.677	17,19	.906	23,0	5	4 1/2	127
ABM13	13	.726	18,44	.906	23,0	5	4 1/2	127
ABM14	14	.774	19,66	.968	24,6	5	6	170
ABM15	15	.825	20,95	1.000	25,4	5	7	198
ABM16	16	.873	22,17	1.000	25,4	5	8	227
ABM17	17	.921	23,40	1.062	27,0	5	9 1/2	269
ABM18	18	.971	24,66	1.062	27,0	5	10 1/2	298
ABM19	19	1.019	25,88	1.062	27,0	5	11	312
ABM20	20	1.072	27,23	1.187	30,2	5	14	397
ABM21	21	1.121	28,47	1.187	30,2	5	15	425



"AERO" SOCKET ACCESSORIES

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

TURNSCREW SOCKET BIT No. A13

Blade size $\frac{1}{16}$ " $\times$ $\cdot 116$ " (17,5 $\times$ 2,95 mm.)

Boxed quantity—5 Weight 6 oz. boxed.
170 g.

SPEED BRACE No. A42

Solid steel freely revolving handle.

Shank length $8\frac{1}{2}$ " (216 mm.)

Overall length $17\frac{1}{2}$ " (444 mm.)

Boxed quantity—5 Weight 5 lb. 14 oz. boxed.
2665 g.

RATCHET HANDLE No. A45

Instantly reversible by thumb lever without removing the socket. All parts totally enclosed.

Length $6\frac{7}{8}$ " (175 mm.)

28 teeth. Spare parts available, see page 78.

Boxed quantity—5 Weight 2 lb. 13 oz. boxed.
1275 g.

SPINNER HANDLE No. A50

For spinning nuts rapidly. Can be used with all extensions and sockets. Transparent amber colour shockproof handle.

Length $6\frac{3}{4}$ " (171 mm.)

Boxed quantity—5 Weight 1 lb. 6 oz. boxed.
624 g.

BAR HANDLE No. A56

For use with Part Nos. A63, A79, A96, A97, A98 and ED series sockets.

Size $\frac{3}{8}$ " $\times$ 8" (9,52 $\times$ 203 mm.)

Boxed quantity—10 Weight 2 lb. 10 oz. boxed.
1190 g.

"L" HANDLE No. A61

Spring loaded ball at each end.

Length $6\frac{1}{4}$ " (159 mm.). Offset 1" (25 mm.)

Boxed quantity—5 Weight 1 lb. 5 oz. boxed.
596 g.

SLIDING OFFSET HANDLE No. A70

Has retained sliding bar enabling adaptor to be used with varying leverage or operated in a restricted space.

Bar size $\frac{1}{32}$ " $\times$ 8" (10,32 $\times$ 203 mm.)

Boxed quantity—5 Weight 1 lb. 14 oz. boxed.
851 g.

RATCHET UNIT No. A76

Instantly reversible by thumb lever without removing the socket.

Length $2\frac{1}{2}$ " (63 mm.). Diameter $1\frac{1}{8}$ " (41 mm.)

Weight 11 oz. each.
312 g.

SWIVEL HANDLE No. A79

With hinged link permitting operation at varying angles. Drilled for bar handle A56. The head does not have a square socket.

Length $9\frac{1}{2}$ " (241 mm.)

Boxed quantity—5 Weight 3 lb. 10 oz. boxed.
1644 g.

UNIVERSAL JOINT No. A91

Can be used in any position in an assembly. Short coupled.

Length $2\frac{1}{16}$ " (52 mm.)

Boxed quantity—5 Weight 1 lb. boxed.
454 g.

FLEXIBLE EXTENSION No. A93

For reaching difficult positions. The flexible steel cable shaft is suitable for right or left hand drive. Cable shaft has red painted finish.

Length 8" (203 mm.)

Boxed quantity—5 Weight 1 lb. 6 oz. boxed.
624 g.

EXTENSIONS

May be used in conjunction with all parts or together where longer reach is required. Drilled for bar handle A56. Square socket in head.

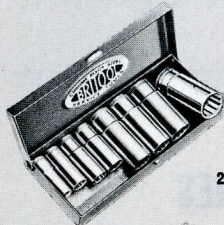
Boxed quantity—5

No.	Length		Shank Dia.		Weight Boxed	
	in.	mm.	in.	mm.	lb. oz.	g.
A63	1½	38	1½ ₃₂	10,32	10	283
A96	3	76	1½ ₃₂	10,32	1 0	454
A97	6	152	1½ ₃₂	10,32	1 8	681
A98	12	305	1½ ₃₂	10,32	2 9	1162

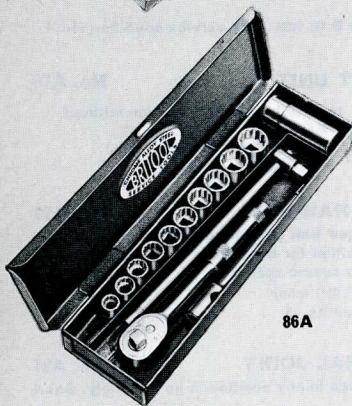
3/8"



2496B



2491C



86A

3/8" SQUARE DRIVE

SETS OF SOCKETS

Ideal for inclusion in larger sets, particularly 2498B which gives complete coverage of ISO metric sizes within the 3/8" square drive range.

Each set is contained in an attractive cardboard box.

Size: 5" x 1 1/4" x 1 1/8" (127 x 32 x 28 mm.)

SET No. 2496B Contains 6 AB Series Sockets.

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16".

SET No. 2498B Contains 7 AHM/ABM Series Sockets.

ISO metric sizes: 7 - 8 - 10 - 11 - 13 - 17 - 19 mm.

Weight 9 oz. per set.

255 g.

SET OF DEEP BI-HEXAGON SOCKETS

This set contains sockets as detailed on page 9.

Contained in a steel case, red hammer finish.

Size: 7 1/16" x 2 15/16" x 1 1/16" (179 x 75 x 30 mm.).

SET No. 2491C Contains 8 Deep Bi-hexagon Sockets AD Series.

American sizes: 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8" Across Flats.

Weight 2 lb. 4 oz. per set.

1020 g.

"AERO" SOCKET SETS

Each set is contained in a steel case, red hammer finish.

Size: 11 1/2" x 3 1/4" x 1 1/2" (292 x 82 x 38 mm.)

SWIVEL HANDLE SETS

SPECIFICATION

3 Accessories as follows:— **A70** Sliding Offset Handle.

A79 Swivel Handle. **A97** 6" Extension.

SET No. 83A

3 Accessories as specified. 8 Bi-hexagon Sockets.

B.A. sizes: 0-1-2. Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8".

Deep for 14 mm. Sparking Plugs (ADH812). Weight 3 lb. 15 oz. per set.

1786 g.

SET No. 84A

3 Accessories as specified. 10 Bi-hexagon Sockets.

American sizes: 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4" Across Flats

Deep for 14 mm. Sparking Plugs (ADH812). Weight 4 lb. 2 oz. per set.

1871 g.

SET No. 87B

3 Accessories as specified. 15 Bi-hexagon and Hexagon Sockets.
Metric sizes: 7-8-9-10-11-12-13-14-15-16-17-18-19-20-21 mm.

Weight 4 lb. 4 oz. per set.

1927 g.

RATCHET HANDLE SETS

SPECIFICATION

3 Accessories as follows:— **A70** Sliding Offset Handle.

A45 Ratchet Handle. **A97** 6" Extension.

SET No. 85A

3 Accessories as specified. 8 Bi-hexagon Sockets.

B.A. sizes: 0-1-2. Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8".

Deep for 14 mm. Sparking Plugs (ADH812).

Weight 3 lb. 12 oz. per set.

1701 g.

SET No. 86A

3 Accessories as specified. 10 Bi-hexagon Sockets.

American sizes: 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4" Across Flats.

Deep for 14 mm. Sparking Plugs (ADH812).

Weight 3 lb. 15 oz. per set.

1786 g.

SET No. 88B

3 Accessories as specified. 15 Bi-hexagon and Hexagon Sockets.

Metric sizes: 7-8-9-10-11-12-13-14-15-16-17-18-19-20-21 mm.

Weight 4 lb. 4 oz. per set.

1927 g.

SET No. 86B

3 Accessories as follows:— **A74/20T** Ratchet Handle. **A79** Swivel Handle. **A97** 6" Extension.

10 Bi-hexagon Sockets—American sizes: 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4" Across Flats.

Deep for 14 mm. Sparking Plugs (ADH812).

Weight 4 lb. 3 oz. per set.

1899 g.

3/8" SQUARE DRIVE

BASIC SOCKET SETS

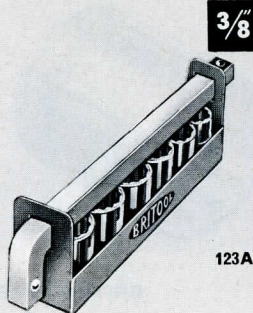
These make good basic kits which can be added to as desired or included in larger sets. Contained in red enamelled steel cage.
Size: $5\frac{1}{8}" \times 1\frac{7}{8}" \times 1\frac{1}{8}"$ (130 × 48 × 28 mm.)

SET No. 123A contains **A61** Offset Handle. 6 Bihexagon Sockets.
Whitworth sizes: $\frac{1}{16}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$.

SET No. 124A contains **A61** Offset Handle. 6 Bihexagon Sockets.
American sizes: $\frac{3}{16}"$, $\frac{1}{2}"$, $\frac{5}{16}"$, $\frac{5}{8}"$, $\frac{1}{2}"$, $\frac{3}{4}"$ Across Flats.

SET No. 125A contains **A61** Offset Handle. 6 Bihexagon Sockets.
Metric sizes: 9-10-11-14-17-19 mm.

Weight **1 lb.** per set.
454 g.



123A

"AERO" SOCKET SETS

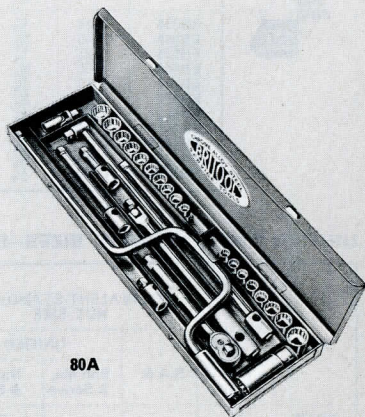
These sets contain a comprehensive range of accessories and are available with British, American or Metric size sockets.
Each set is contained in a steel case, red hammer finish.

Size: $18" \times 5\frac{1}{4}" \times 1\frac{3}{8}"$ (457 × 133 × 35 mm.)

SPECIFICATION

9 Accessories as follows:—

- | | |
|---------------------------------------|-----------------------------|
| A42 Speed Brace. | A91 Universal Joint. |
| A70 Sliding Offset Handle. | A96 3" Extension. |
| A45 Ratchet Handle. | A97 6" Extension. |
| A79 Swivel Handle. | A98 12" Extension. |
| A63 $1\frac{1}{2}"$ Extension. | |



80A

SET No. 82A

9 Accessories as specified. 8 Bihexagon Sockets.

B.A. sizes: 0, 1, 2. Whitworth sizes: $\frac{1}{16}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$.

Deep for 14 mm. Sparking Plugs (ADH812).

Weight **8 lb. 10 oz.** per set.
3912 g.

SET No. 81A

9 Accessories as specified. 10 Bihexagon Sockets.

American sizes: $\frac{3}{16}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$ Across Flats.

Deep for 14 mm. Sparking Plugs (ADH812).

Weight **8 lb. 14 oz.** per set.
4026 g.

SET No. 79B

9 Accessories as specified. 15 Bihexagon and Hexagon Sockets.

Metric sizes: 7-8-9-10-11-12-13-14-15-16-17-18-19-20-21 mm.

Weight **8 lb. 14 oz.** per set.
4026 g.

SET No. 77A

9 Accessories as specified. 27 Bihexagon and Hexagon Sockets.

American sizes: $\frac{3}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$ Across Flats.

Metric sizes: 7-8-9-10-11-12-13-14-15-16-17-18-19-20-21 mm.

Deep for 14 mm. Sparking Plugs (ADH812).

Weight **10 lb.** per set.
4536 g.

SET No. 80A

9 Accessories as specified. 18 Bihexagon Sockets.

B.A. sizes: 0, 1, 2. Whitworth sizes: $\frac{1}{16}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$.

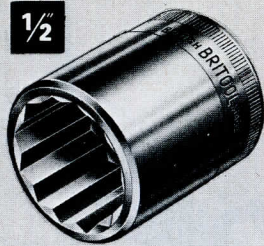
American sizes: $\frac{3}{16}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$, $\frac{1}{2}"$ Across Flats.

Deep for 14 mm. Sparking Plugs (ADH812).

Weight **9 lb. 4 oz.** per set.
4195 g.



1/2



1/2" SQUARE DRIVE

"ENGINEERS" SOCKETS

THE EB, EBM AND EQ SERIES

Made from Chrome Alloy Steel.

Bright nickel and chrome plated finish to B.S. 1224:1970, service condition No. 1.

Dimensions conform to B.S. 4006:1966.

Ball retaining groove on each face of square drive.

BRITISH SIZES—BIHEXAGON

No.	Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		Maximum Outside Diameter Socket End		Nominal Overall Length		Boxed Quantity	Weight Boxed	
		Whit.	B.S.	in.	mm.	in.	mm.		lb. oz.	g.
EB338	.338	1/8	—	.535	13.59	1.500	38.1	5	10	283
EB445	.445	3/16	1/4	.670	17.02	1.500	38.1	5	12	340
EB525	.525	1/4	3/8	.770	19.56	1.500	38.1	5	12	340
EB600	.600	5/16	1/2	.863	21.92	1.500	38.1	5	13	368
EB710	.710	3/8	5/8	1.001	25.40	1.500	38.1	5	1 0	454
EB820	.820	1/2	3/4	1.136	28.85	1.500	38.1	5	1 3	539
EB920	.920	5/8	7/8	1.264	32.10	1.500	38.1	5	1 6	624
EB1010	1.010	3/4	1 1/8	1.375	34.92	1.625	41.3	5	1 13	822
EB1100	1.100	7/8	1 1/4	1.490	37.85	1.750	44.4	5	2 4	1020
EB1200	1.200	1 1/8	1 3/4	1.614	40.99	1.875	47.6	5	2 12	1247
EB1300	1.300	3/4	7/8	1.738	44.14	1.875	47.6	5	3 4	1474

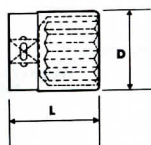
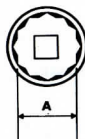


UNIFIED AND AMERICAN SIZES—BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.		lb. oz.	g.
			Bolt dia. & Series	Nut size & Series							
EB375	3/8	—	—	10Mp	.582	14,78	1.500	38,1	5	11	312
EB437	7/16	1/4	1/4N	1/4N	.660	16,76	1.500	38,1	10	1 6	624
EB500	1/2	5/16	5/16N	5/16N	.738	18,74	1.500	38,1	10	1 6	624
EB562	5/8	3/8	3/8N	3/8N	.816	20,73	1.500	38,1	10	1 6	624
EB594	3/4	7/16	7/16N	—	.856	21,74	1.500	38,1	5	11	312
EB625	7/8	1/2	1/2N	—	.896	22,76	1.500	38,1	10	1 8	681
EB656	1 1/16	—	—	—	.935	23,75	1.500	38,1	5	13	368
EB687	1 1/8	—	—	7/16N	.974	24,74	1.500	38,1	10	1 10	737
EB750	3/4	1/2	1/2N	1/2N	1.051	26,69	1.500	38,1	10	2 0	907
EB781	7/8	—	—	—	1.090	27,69	1.500	38,1	5	1 1	482
EB812	1 1/16	—	—	3/8N	1.128	28,65	1.500	38,1	5	1 1	482
EB875	7/8	3/8	3/8H	1/2H 3/16N	1.206	30,63	1.500	38,1	5	1 5	596
EB937	1 1/16	—	—	3/8N	1.286	32,66	1.500	38,1	5	1 8	681
EB1000	1	1/2	1/2H	—	1.364	34,64	1.500	38,1	5	1 11	766
EB1062	1 1/8	3/4	3/4H	3/4H	1.443	36,65	1.625	41,3	5	2 1	935
EB1125	1 1/8	—	—	3/4N	1.521	38,63	1.750	44,4	5	2 7	1105
EB1187	1 1/2	—	—	—	1.600	40,64	1.750	44,4	5	2 11	1219
EB1250	1 3/4	3/8	3/4H	3/4H	1.677	42,59	1.875	47,6	5	3 2	1418

BISQUARE SIZES

No.	Nominal Size Across Flats in.	Maximum Outside Diameter Socket End		Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	lb. oz.	g.
EQ375	3/8	.671	17.04	1.375	34.9	1 2	511
EQ437	7/16	.796	20.22	1.375	34.9	1 4	567
EQ500	1/2	.875	22.22	1.375	34.9	1 6	624
EQ562	5/8	1.015	25.78	1.375	34.9	1 14	851
EQ625	3/4	1.062	26.97	1.375	34.9	1 14	851
EQ687	7/8	1.156	29.36	1.375	34.9	2 8	1134
EQ750	1 1/8	1.250	31.75	1.500	38.1	3 2	1418
EQ812	1 1/4	1.375	34.92	1.625	41.3	4 4	1927
EQ875	1 3/8	1.500	38.10	1.625	41.3	5 2	2325
EQ1000	1 1/2	1.718	43.64	1.750	44.4	7 8	3405



METRIC SIZES—BIHEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		in.	mm.	in.	mm.		lb. oz.	g.
EBM10	10	-604	15,34	1-500	38,1	5	10	283
EBM11	11	-654	16,61	1-500	38,1	5	10	283
EBM12	12	-704	17,88	1-500	38,1	5	10	283
EBM13	13	-753	19,13	1-500	38,1	5	10	283
EBM14	14	-802	20,37	1-500	38,1	5	11	312
EBM15	15	-852	21,64	1-500	38,1	5	11	312
EBM16	16	-899	22,83	1-500	38,1	5	12	340
EBM17	17	-948	24,08	1-500	38,1	5	13	368
EBM18	18	-998	25,35	1-500	38,1	5	14	397
EBM19	19	1-047	26,59	1-500	38,1	5	15	425
EBM20	20	1-098	27,89	1-500	38,1	5	1	482
EBM21	21	1-145	29,08	1-500	38,1	5	1	511
EBM22	22	1-196	30,38	1-500	38,1	5	1	567
EBM23	23	1-246	31,65	1-500	38,1	5	1	596
EBM24	24	1-299	32,99	1-500	38,1	5	1	681
EBM25	25	1-348	34,24	1-500	38,1	5	1	766
EBM26	26	1-395	35,43	1-625	41,3	5	1	879
EBM27	27	1-445	36,70	1-625	41,3	5	2	907
EBM28	28	1-493	37,92	1-750	44,4	5	2	1020
EBM29	29	1-542	39,17	1-750	44,4	5	2	1134
EBM30	30	1-585	40,39	1-750	44,4	5	2	1162
EBM32	32	1-687	42,85	1-875	47,6	5	3	1389

"ENGINEERS" UNIVERSAL JOINT SOCKETS

THE EU AND EUM SERIES

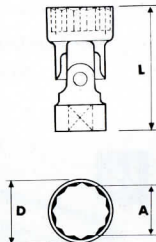
BRITISH SIZES—BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		Whit.	B.S.	in.	mm.	in.	mm.	lb. oz.	g.
EU445	-445	3/16	1/4	-670	17,02	2 3/8	60,3	2 2	964
EU525	-525	1/4	3/8	-770	19,56	2 7/8	60,3	2 2	964
EU600	-600	5/16	3/8	-863	21,92	2 1/2	63,5	2 10	1190
EU710	-710	3/8	1/2	1-001	25,42	2 3/4	69,8	2 12	1247
EU820	-820	7/16	1/2	1-136	28,85	2 3/4	69,8	3 6	1531
EU920	-920	1/2	3/4	1-264	32,10	2 3/4	69,8	3 12	1701



UNIFIED AND AMERICAN SIZES—BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	lb. oz.
			Bolt dia. and Series	Nut Size and Series					
EU437	7/16	1/4	1/4N	1/4N	-660	16,76	2 3/8	60,3	2 2
EU500	9/16	3/8	3/8N	3/8N	-738	18,74	2 3/8	60,3	2 4
EU562	5/8	1/2	1/2N	1/2N	-816	20,73	2 3/8	60,3	2 8
EU687	11/16	5/8	5/8N	5/8N	-896	22,76	2 1/2	63,5	2 12
EU750	1 1/16	3/4	3/4N	3/4N	-974	24,74	2 1/2	63,5	2 12
EU875	1 1/8	7/8	7/8N	7/8N	1-051	26,69	2 3/4	69,8	3 8
					1-206	30,63	2 3/4	69,8	3 14



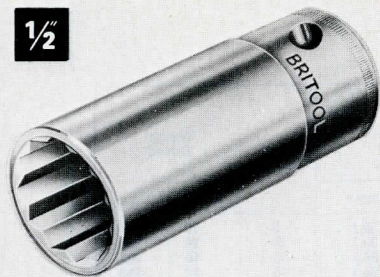
METRIC SIZES—BIHEXAGON

No.	A Nominal Size Across Flats mm.	D Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	lb. oz.	g.
EUM11	11	-654	16,61	2 3/8	60,3	2 0	907
EUM13	13	-753	19,13	2 3/8	60,3	2 3	992
EUM17	17	-948	24,08	2 1/2	63,5	2 14	1304
EUM19	19	1-047	26,59	2 3/4	69,8	3 8	1588
EUM22	22	1-196	30,38	2 3/4	69,8	3 13	1729

Made from Chrome Alloy Steel.

Bright nickel and chrome plated finish to
B.S. 1224: 1970, service condition No. 1.

1/2



1/2" SQUARE DRIVE

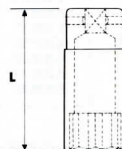
"ENGINEERS" SOCKETS DEEP BIHEXAGON

Extra long for use when the bolt protrudes beyond the normal distance covered by standard sockets. Bar handle hole to suit part No. A56, see page 11.

NOT RECOMMENDED FOR USE ON 'U' BOLTS.

BRITISH SIZES—DEEP BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Overall Length		Weight per 10	
		Whit.	B.S.	in.	mm.	in.	mm.	lb. oz.	g.
ED445	.445	3/16	1/4	.670	17.02	3	76.2	2 4	1020
ED525	.525	1/4	5/16	.770	19.56	3	76.2	2 4	1020
ED600	.600	3/8	3/8	.863	21.92	3 1/4	82.5	2 14	1304
ED710	.710	3/8	7/16	1.001	25.42	3 1/4	82.5	3 12	1701
ED820	.820	7/16	1/2	1.136	28.85	3 1/4	82.5	4 8	2041
ED920	.920	1/2	9/16	1.264	32.10	3 1/2	88.9	6 4	2835
ED1010	1.010	9/16	5/8	1.375	34.92	3 1/2	88.9	6 14	3119
ED1100	1.100	5/8	11/16	1.490	37.85	3 1/2	88.9	8 8	3856



UNIFIED AND AMERICAN SIZES—DEEP BIHEXAGON

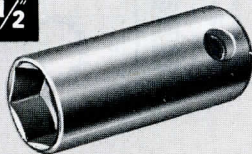
No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Overall Length		Weight per 10	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	lb. oz.	g.
			Bolt dia. and Series	Nut size and Series						
ED500	1/2	3/16	5/16 N	5/16 N	.738	18.74	3	76.2	2 4	1020
ED562	5/16	3/8	3/8 N	3/8 N	.816	20.73	3 1/4	82.5	2 8	1134
ED625	5/8	7/16	7/16 N	—	.896	22.76	3 1/4	82.5	3 2	1418
ED687	11/16	—	—	7/16 N	.974	24.74	3 1/4	82.5	3 6	1531
ED750	3/4	1/2	1/2 N	1/2 N	1.051	26.69	3 1/4	82.5	4 0	1814
ED812	7/8	—	1/2 N	—	1.128	28.65	3 1/4	82.5	4 8	2041
ED875	1 1/8	5/8	5/8 H	5/8 H	1.206	30.63	3 1/2	88.9	5 10	2551
ED937	1 1/16	5/8	5/8 H	5/8 N	1.286	32.66	3 1/2	88.9	6 10	3005
ED1000	1	11/16	—	5/8 H	1.364	34.64	3 1/2	88.9	7 8	3402
ED1062	1 1/8	3/4	—	5/8 H	1.443	36.65	3 1/2	88.9	7 10	3458
ED1125	1 1/16	—	3/4 N	3/4 N	1.521	38.63	3 1/2	88.9	9 2	4139

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

For set of deep sockets see page 18.

For 'U' bolt application refer to deep Impact sockets.

1/2



SPARK-PLUG SOCKET

Specially designed for use with 14 mm. plugs.

Fitted with neoprene tube insert which retains plug and prevents damage.

No. EDH812 Size: 1/4" A/F HEXAGON.

Outside diameter: 1.063" (27 mm.)

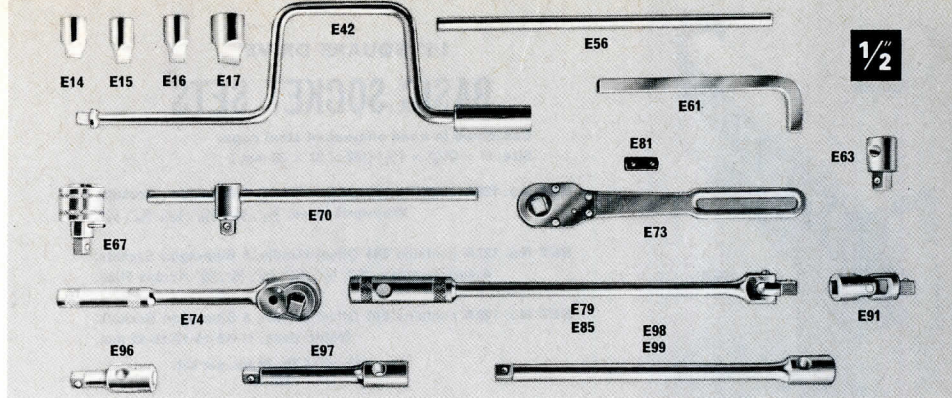
Overall length: 2.795" (71 mm.)

Boxed quantity—10

Weight 3 lb. 4 oz. Boxed
1474 g.

Made from Chrome Alloy Steel.
Bright nickel and chrome plated finish to
B.S. 1224: 1970, service condition No. 1.

Also available in 3/8" square drive (ADH812), see page 9.



"ENGINEERS" SOCKET ACCESSORIES

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

TURNSCREW SOCKET BITS

Suitable for a great number of screw turning operations. Hollow ground blades.

No.	Blade Size		Weight Each	
	in.	mm.	oz.	g.
E14	1	× 120	25.4 × 3,05	2½ 71
E15	¾	× 105	18,6 × 2,67	2 57
E16	½	× 150	23,8 × 3,81	2½ 71
E17	1½	× 150	30,2 × 3,81	5 142

SPEED BRACE

No. E42

Solid steel freely revolving handle.
Overall length 17" (432 mm.) Shank length 7¼" (184 mm.)
Boxed quantity—5 Weight 8 lb. 10 oz. boxed.
3912 g.

BAR HANDLE

No. E56

For use with Part Nos. E63, E79, E85, E96, E97, E98, E99. Size ½" × 12" (12,7 × 305 mm.)
Boxed quantity—10 Weight 7 lb. boxed.
3175 g.

"L" HANDLE

No. E61

Spring loaded ball at each end.
Length 7¼" (184 mm.) Offset 1½" (38 mm.)
Boxed quantity—5 Weight 3 lb. boxed.
1361 g.

SHORT "T" ADAPTOR

No. E63

When combined with No. E56 bar handle either a short "T" or offset handle is formed.
Length 1½" (48 mm.)
Boxed quantity—5 Weight 1 lb. 5 oz. boxed.
596 g.

RATCHET UNIT

No. E67

Lever operated change mechanism.
Socket need not be removed. 20 teeth.
Length 2½" (67 mm.) Diameter 1½" (41,2 mm.)
Weight 11 oz. each.
312 g.

SLIDING OFFSET HANDLE

No. E70

Retained bar.
Length 12" (305 mm.)
Boxed quantity—5 Weight 5 lb. 3 oz. boxed.
2353 g.

RATCHET HANDLE

No. E73

All moving parts totally enclosed. Use No. E81 coupler to connect to sockets. To reverse, turn the ratchet over. Spare parts available, see page 78.
Length 10½" (267 mm.) 12 teeth.
Boxed quantity—5 Weight 6 lb. 2 oz. boxed.
2779 g.

RATCHET HANDLE

No. E74/40T

Instantly reversible by thumb lever without removing the socket. All parts totally enclosed.
Length 10" (254 mm.) 40 teeth.
Spare parts available, see page 78.
Boxed quantity—5 Weight 6 lb. 12 oz. boxed.
3062 g.

SWIVEL HANDLE

No. E79

With hinged link permitting operation at varying angles. Drilled for bar handle E56. The head does not have a square socket. Length 15" (381 mm.)
Boxed quantity—5 Weight 9 lb. boxed.
4082 g.

COUPLER

No. E81

For use with No. E73 ratchet handle.
Length 1¼" (32 mm.) Black rustproof finish.
Boxed quantity—5 Weight 6 oz. boxed.
170 g.

SWIVEL HANDLE

No. E85

Similar to E79. Length 18" (457 mm.)
Boxed quantity—5 Weight 10 lb. boxed.
4536 g.

UNIVERSAL JOINT

No. E91

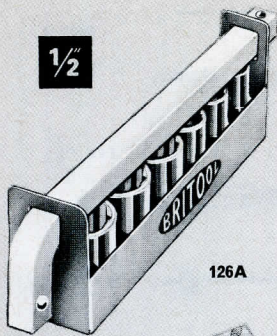
Can be used in any position in an assembly. Short coupled. Length 2¾" (70 mm.)
Boxed quantity—5 Weight 1 lb. 10 oz. boxed.
737 g.

EXTENSIONS

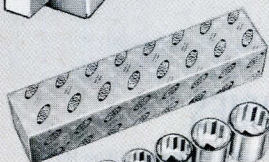
Drilled for bar handle E56. Square socket in head.
Boxed quantity—5

No.	Length		Shank Dia.		Weight Boxed	
	in.	mm.	in.	mm.	oz.	g.
E96	3	76	2½/32	16,67	2 0	907
E97	6	152	2½/32	16,67	3 6	1531
E98	12	305	2½/32	16,67	6 2	2779
E99	18	457	2½/32	16,67	9 0	4082

1/2



126A



2499B

1/2" SQUARE DRIVE

BASIC SOCKET SETS

Contained in a red enamelled steel cage.

Size: 6" × 2 1/4" × 1 1/2" (152 × 57 × 38 mm.)

SET No. 126A contains **E61** Offset Handle, 6 Bihexagon Sockets.
Whitworth sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2".

SET No. 127A contains **E61** Offset Handle, 6 Bihexagon Sockets.
American sizes: 7/16", 1/2", 9/16", 5/8", 3/4", 7/8" Across Flats.

SET No. 128A contains **E61** Offset Handle, 6 Bihexagon Sockets.
Metric sizes: 11-12-14-17-19-22 mm.

Weight **1 lb. 14 oz.** per set.
851 g.

SET OF METRIC SOCKETS

This set includes all the ISO metric sizes within the 1/2" square drive range. Ideal as an addition to existing sets. Supplied in carton.

SET No. 2499B Contains 10 Bihexagon Sockets.
ISO metric sizes: 10 - 11 - 13 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm.

Weight **2 lb. 14 oz.** per set.
1304 g.

"ENGINEERS" SOCKET SETS

Contained in steel cases, red hammer finish as follows:—

Nos. 109A, 110A, 112A. Size: 12 1/2" × 2 7/8" × 1 3/4" (317 × 73 × 44 mm.)

Nos. 111A, 113A. Size: 13" × 5 3/8" × 1 7/8" (330 × 136 × 48 mm.)

SPECIFICATION 5 Accessories as follows:—

E56 Bar Handle. **E63** Short 'T' Adaptor. **E73** Ratchet Handle. **E81** Coupler. **E97** 6" Extension.

SET No. 109B

5 Accessories as specified. 6 Bihexagon Sockets.

Whitworth sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2".

Weight **5 lb. 14 oz.** per set.
2665 g.

SET No. 110B

5 Accessories as specified. 6 Bihexagon Sockets.

American sizes: 7/16", 1/2", 9/16", 5/8", 3/4", 7/8" Across Flats.

Weight **5 lb. 4 oz.** per set.
2381 g.

SET No. 112B

5 Accessories as specified. 6 Bihexagon Sockets.

Metric sizes: 12-14-16-18-20-22 mm.

Weight **5 lb. 14 oz.** per set.
2665 g.

SET No. 113B

5 Accessories as specified. 12 Bihexagon Sockets.

Metric sizes: 11-12-14-15-16-17-18-19-20-21-22-23 mm.

Weight **7 lb. 13 oz.** per set.
3543 g.

SET No. 111B

5 Accessories as specified. 12 Bihexagon Sockets.

Whitworth sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2".

American sizes: 7/16", 1/2", 9/16", 5/8", 3/4", 7/8" Across Flats.

Weight **7 lb. 2 oz.** per set.
3232 g.

SET OF DEEP SOCKETS

This set contains sockets as detailed on page 16. Contained in steel case, red hammer finish.

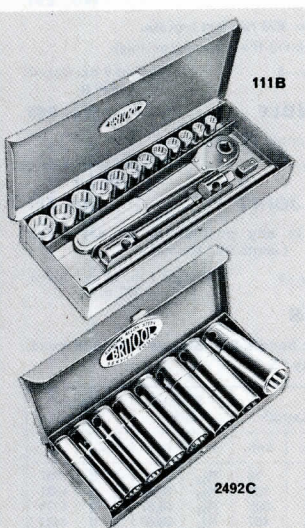
Size: 9" × 3 3/4" × 1 1/2" (229 × 95 × 38 mm.)

SET No. 2492C

Contains 8 deep Bihexagon Sockets ED Series

American sizes: 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1" Across Flats.

Weight **5 lb.** per set.
2268 g.



111B

2492C

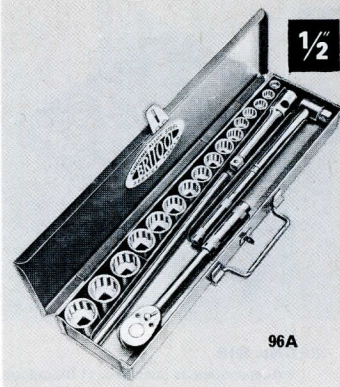


1/2" SQUARE DRIVE "ENGINEERS" SOCKET SETS

Available with ratchet handle or swivel handle as detailed.
Set No. 96B contains both a swivel handle and a ratchet handle.

Contained in steel case, red hammer finish, with folding carrying handle, padlock and keys.

Size: 19" x 4 3/4" x 2" (483 x 121 x 51 mm.)



SWIVEL HANDLE SETS

SPECIFICATION

4 Accessories as follows:—

E56 Bar Handle.

E70 Sliding Offset Handle.

E79 Swivel Handle.

E97 6" Extension.

SET No. 90A

4 Accessories as specified. 11 Bi-hexagon Sockets.

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 11/16", 3/4".

Weight **11 lb. 6 oz.** per set.
5160 g.

SET No. 91A

4 Accessories as specified. 16 Bi-hexagon Sockets.

American sizes: 3/16", 1/2", 5/16", 19/32", 5/8", 11/16", 3/4", 25/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.

Weight **12 lb. 8 oz.** per set.
5671 g.

SET No. 94A

4 Accessories as specified. 13 Bi-hexagon Sockets.

Unified sizes: 3/8", 7/16", 1/2", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1 1/16", 1 1/8", 1 1/4" Across Flats.

Weight **11 lb. 8 oz.** per set.
5217 g.

SET No. 93B

4 Accessories as specified. 16 Bi-hexagon Sockets.

Metric sizes: 10-11-12-13-14-15-16-17-19-21-22-24-27-28-30-32 mm.

Weight **12 lb. 4 oz.** per set.
5556 g.

RATCHET HANDLE SETS

SPECIFICATION

3 Accessories as follows:— **E70** Sliding Offset Handle. **E74/40T** Ratchet Handle. **E97** 6" Extension.

SET No. 95B

3 Accessories as specified. 11 Bi-hexagon Sockets.

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 11/16", 3/4".

Weight **10 lb. 3 oz.** per set.
4441 g.

SET No. 96C

3 Accessories as specified. 16 Bi-hexagon Sockets.

American sizes: 3/16", 1/2", 5/16", 19/32", 5/8", 11/16", 3/4", 25/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.

Weight **11 lb. 5 oz.** per set.
4952 g.

SET No. 97B

3 Accessories as specified. 13 Bi-hexagon Sockets.

Unified sizes: 3/8", 7/16", 1/2", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1 1/16", 1 1/8", 1 1/4" Across Flats.

Weight **10 lb. 5 oz.** per set.
4678 g.

SET No. 98B

3 Accessories as specified. 16 Bi-hexagon Sockets.

Metric sizes: 10-11-12-13-14-15-16-17-19-21-22-24-27-28-30-32 mm.

Weight **10 lb. 5 oz.** per set.
4678 g.

SET No. 96B

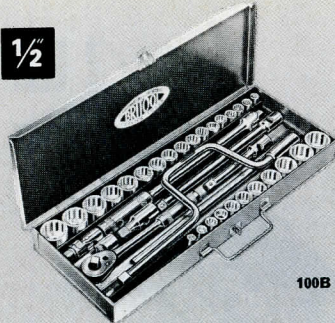
4 Accessories as follows:— **E56** Bar Handle. **E74/40T** Ratchet Handle. **E79** Swivel Handle. **E97** 6" Extension.

16 Bi-hexagon Sockets as follows:—

American sizes: 3/16", 1/2", 5/16", 19/32", 5/8", 11/16", 3/4", 25/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.

Weight **13 lb.** per set.
5897 g.

1/2"



100B

1/2" SQUARE DRIVE "ENGINEERS" SOCKET SETS

Contained in a steel case, red hammer finish, complete with folding carrying handle, padlock and keys.

Size: 20" x 7 3/4" x 2" (508 x 197 x 51 mm.)

SPECIFICATION 9 Accessories as follows:—

- | | |
|---------------------------|----------------------|
| E14 Turnscrew Socket Bit. | E91 Universal Joint. |
| E42 Speed Brace. | E96 3" Extension. |
| E56 Bar Handle. | E97 6" Extension. |
| E74/40T Ratchet Handle. | E98 12" Extension. |
| E79 Swivel Handle. | |

SET No. 101B

9 Accessories as specified. 11 Bihexagon Sockets

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8".

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 19 lb. per set.
8618 g.

SET No. 102B

9 Accessories as specified. 16 Bihexagon Sockets

American sizes: 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

Deep for 14 mm. Sparking Plug (EDH812).

Weight 20 lb. per set.
9072 g.

SET No. 103B

9 Accessories as specified. 22 Bihexagon Sockets

Metric sizes: 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm. Weight 21 lb. 4 oz. per set.
9639 g.

SET No. 100B

9 Accessories as specified. 27 Bihexagon Sockets

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

American sizes: 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 23 lb. per set.
10433 g.

SET No. 144A

9 Accessories as specified. 33 Bihexagon Sockets

American sizes: 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

Metric sizes: 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-30-32 mm.

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 24 lb. per set.
10866 g.

These sets contain an adequate range of accessories and will prove admirably suitable for the mechanic requiring a set covering all but the largest size sockets.

Contained in a steel case, red hammer finish, with folding carrying handle, padlock and keys.

Size: 20" x 7 3/4" x 2" (508 x 197 x 51 mm.)

SPECIFICATION 7 Accessories as follows:—

- | | |
|----------------------------|------------------------|
| E42 Speed Brace. | E63 Short "T" Adaptor. |
| E74/40T Ratchet Handle. | E91 Universal Joint. |
| E97 6" Extension. | E98 12" Extension. |
| E56 Bar Handle 1/2" x 12". | |

SET No. 143D

7 Accessories as specified. 18 Bihexagon Sockets.

Metric sizes: 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-26-27-28 mm.

Deep for 14 mm. Sparking Plugs (EDH812). Weight 15 lb. 10 oz. per set.
7088 g.

SET No. 140C

7 Accessories as specified. 20 Bihexagon Sockets.

Whitworth sizes: 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

American sizes: 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 16 lb. 4 oz. per set.
7371 g.

SET No. 141B

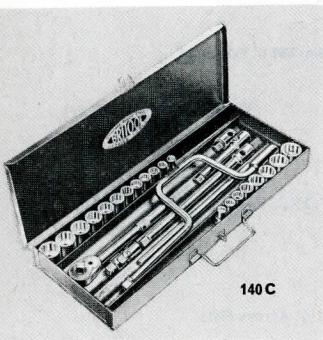
7 Accessories as specified. 21 Bihexagon Sockets.

American sizes: 1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", 3".

Metric sizes: 10-11-12-13-14-15-16-17-18-19-20-21-22-24 mm.

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 15 lb. per set.
6804 g.



140C

1/2" SQUARE DRIVE "ENGINEERS" SOCKET SETS

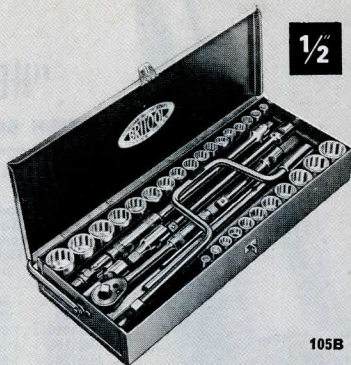
These sets are housed in a double decker pattern steel case with removable tray.

The case has a red hammer finish and tubular carrying handle which folds flat. Complete with padlock and keys.

Size: 20 1/2" x 8 1/4" x 4 1/4" (521 x 210 x 108 mm.)

SPECIFICATION 11 Accessories as follows:—

- | | |
|-----------------------------------|-----------------------------|
| E14 Turnscrew Socket Bit. | E91 Universal Joint. |
| E42 Speed Brace. | E96 3" Extension. |
| E56 Bar Handle. | E97 6" Extension. |
| E70 Sliding Offset Handle. | E98 12" Extension. |
| E74/40T Ratchet Handle. | E99 18" Extension. |
| E79 Swivel Handle. | |



105B

SET No. 106B

11 Accessories as specified. 11 Bi-hexagon Sockets.

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 1 7/8", 2" Across Flats.

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 27 lb. 8 oz. per set.
12474 g.

SET No. 107B

11 Accessories as specified. 16 Bi-hexagon Sockets.

American sizes: 1/8", 1/2", 3/16", 1/32", 5/16", 1/16", 3/4", 5/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.
Deep for 14 mm. Sparking Plugs (EDH812).

Weight 28 lb. per set.
12700 g.

SET No. 108B

11 Accessories as specified. 22 Bi-hexagon Sockets.

Metric sizes: 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm. Weight 29 lb. per set.
13154 g.

SET No. 105B

11 Accessories as specified. 27 Bi-hexagon Sockets.

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 1 7/8", 2" Across Flats.

American sizes: 1/8", 1/2", 3/16", 1/32", 5/16", 1/16", 3/4", 5/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.
Deep for 14 mm. Sparking Plugs (EDH812).

Weight 32 lb. per set.
14516 g.

SET No. 146A

11 Accessories as specified. 33 Bi-hexagon Sockets.

American sizes: 1/8", 1/2", 3/16", 1/32", 5/16", 1/16", 3/4", 5/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.
Metric sizes: 10-11-12-13-14-15-16-17-19-21-22-23-24-27-28-30-32 mm.

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 32 lb. per set.
14516 g.

This is the most comprehensive 1/2" square drive set.

It contains the entire range of accessories and all standard sockets in British, American, Metric and Square sizes.

Contained in steel case, red hammer finish, with two folding carrying handles, padlock and keys.

Size: 26 3/16" x 9 5/16" x 2" (665 x 236 x 51 mm.)

SPECIFICATION

14 Accessories as follows:

- | | |
|---------------------------------|-----------------------------------|
| E42 Speed Brace. | E56 Bar Handle 1/2" x 12". |
| E67 Ratchet Unit. | E63 Short 'T' Adaptor. |
| E74/40T Ratchet Handle. | E70 Offset Handle. |
| E91 Universal Joint. | E79 Swivel Handle. |
| E96 3" Extension. | E92 Stud Extractor. |
| E98 12" Extension. | E97 6" Extension. |
| E14 Turnscrew Socket Bit | E99 18" Extension. |

SET No. 145C

14 Accessories as specified.

50 Bi-hexagon Sockets as follows:—

Whitworth sizes: 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 1 7/8", 2" Across Flats.

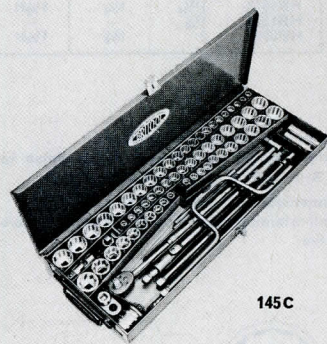
American sizes: 1/8", 1/2", 3/16", 1/32", 5/16", 1/16", 3/4", 5/32", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4" Across Flats.

Metric sizes: 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm.

10 Bisquare Sockets as follows:— 3/8", 1/2", 5/8", 3/4", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 1 7/8", 2" Across Flats.

Deep for 14 mm. Sparking Plugs (EDH812).

Weight 44 lb. per set.
19958 g.



145C

3/4

3/4" SQUARE DRIVE

"HEAVY DUTY" SOCKETS**BRITISH SIZES—BIHEXAGON**

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	in.	mm.	in.	mm.	lb. oz.	g.
HB820	.820	7/16	1/2	1.259	32,00	2.000	50,8	7	198
HB920	.920	1/2	9/16	1.386	34,48	2.000	50,8	8	227
HB1010	1.010	9/16	5/8	1.497	38,02	2.062	52,3	8 1/2	241
HB1100	1.100	5/8	11/16	1.611	40,92	2.187	55,6	10 1/2	298
HB1200	1.200	11/16	3/4	1.736	44,09	2.250	57,1	13	368
HB1300	1.300	3/4	7/8	1.861	47,30	2.312	58,7	13	368
HB1390	1.390	13/16	15/16	1.974	50,16	2.312	58,7	1 1	482
HB1480	1.480	7/8	1	2.087	53,01	2.500	63,5	1 5	596
HB1574	1.574	15/16	1 1/16	2.211	56,16	2.500	63,5	1 9	709
HB1670	1.670	1	1 1/8	2.324	59,03	2.750	69,8	1 12	794
HB1860	1.860	1 1/8	1 1/2	2.563	65,10	3.000	76,2	2 3	992
HB2050	2.050	1 1/4	1 3/8	2.797	71,04	3.250	82,5	2 7	1105
HB2220	2.220	1 3/8	1 1/2	3.013	76,30	3.375	85,7		

UNIFIED AND AMERICAN SIZES—BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	lb. oz.
			Bolt dia. and Series	Nut size and Series					
HB875	7/8	9/16	1/2H	1/2H 9/16N	1.328	33,73	2.000	50,8	7
HB937	15/16	5/8	5/8H	5/8H 7/8N	1.407	35,74	2.000	50,8	7 1/2
HB1060	1	1 1/16	3/4H	3/4H 1 1/8N	1.485	37,72	2.062	52,3	8
HB1125	1 1/8	3/4	5/8H	5/8H 3/4N	1.565	39,75	2.125	54,0	9 1/2
HB1187	1 1/4	7/8	3/4H	3/4H 7/8N	1.642	41,71	2.187	55,6	11
HB1250	1 1/2	1	7/8H	7/8H 1 1/4N	1.722	43,74	2.250	57,1	12 1/2
HB1312	1 5/8	1 1/8	1H	1H 1 1/2N	1.800	45,72	2.250	57,1	14
HB1375	1 3/4	1 1/4	1 1/8H	1 1/8H 1 3/4N	1.879	47,73	2.312	58,7	15 1/2
HB1437	1 7/8	1 1/2	1 1/4H	1 1/4H 1 3/4N	1.954	49,63	2.312	58,7	1 2
HB1500	2	1 3/4	1 1/2H	1 1/2H 2N	2.034	51,66	2.375	60,3	1 3
HB1562	2 1/8	2	1 3/4H	1 3/4H 2 1/4N	2.112	53,64	2.500	63,5	1 6
HB1625	2 1/4	2 1/8	2H	2H 2 1/2N	2.189	55,60	2.625	66,7	1 8
HB1687	2 3/8	2 1/4	2 1/8H	2 1/8H 2 3/4N	2.270	57,66	2.625	66,7	1 11
HB1750	2 1/2	2 3/8	2 1/4H	2 1/4H 2 3/4N	2.346	59,59	2.750	69,8	1 11
HB1812	2 3/4	2 1/2	2 3/8H	2 3/8H 2 3/4N	2.424	61,57	2.750	69,8	1 11
HB1875	2 5/8	2 3/4	2 3/8H	2 3/8H 2 3/4N	2.502	63,55	2.875	73,0	1 12
HB2000	3	2 3/4	2 3/4H	2 3/4H 3N	2.582	65,58	3.000	76,2	1 14
					2.738	69,54	3.125	79,4	2 1

METRIC SIZES—BIHEXAGON

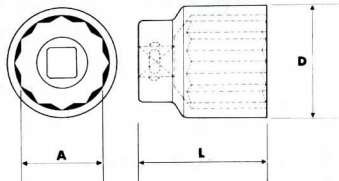
Made from Chrome Alloy Steel.

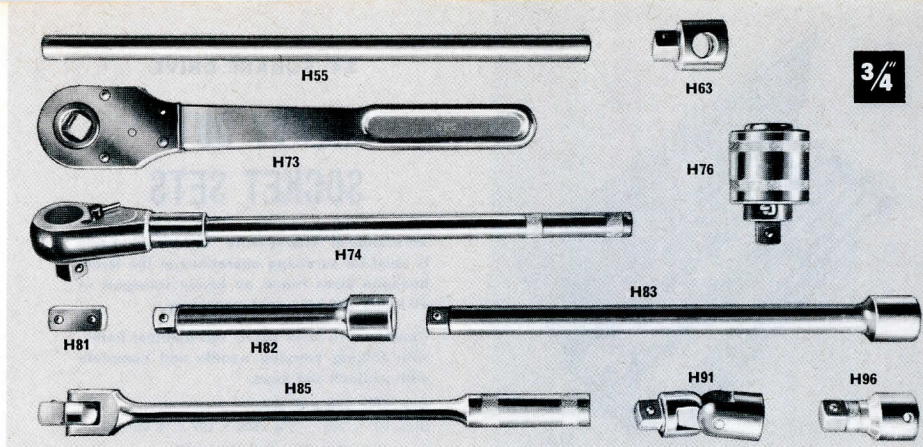
Bright nickel and chrome plated finish to B.S. 1224. 1970, service condition No. 1.

Dimensions conform to B.S. 4006:1966.

Ball retaining groove on each face of square drive.

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	lb. oz.	g.
HBM22	22	1.319	33,50	2.000	50,8	7 1/4	213
HBM23	23	1.368	34,74	2.000	50,8	7 1/2	213
HBM24	24	1.422	36,12	2.000	50,8	7 1/2	213
HBM26	26	1.518	38,56	2.062	52,3	9	255
HBM27	27	1.568	39,83	2.125	54,0	9 1/2	269
HBM29	29	1.666	42,32	2.187	55,6	11 1/2	326
HBM30	30	1.714	43,54	2.250	57,1	12 1/2	354
HBM32	32	1.812	46,03	2.250	57,1	14	397
HBM33	33	1.860	47,24	2.312	58,7	15	425
HBM35	35	1.959	49,76	2.312	58,7	1 1	482
HBM36	36	2.010	51,05	2.375	60,3	1 2	511
HBM38	38	2.107	53,51	2.500	63,5	1 5	596
HBM39	39	2.155	54,74	2.625	66,7	1 8	681
HBM40	40	2.205	56,01	2.625	66,7	1 8	681
HBM41	41	2.255	57,28	2.625	66,7	1 10	737
HBM42	42	2.305	58,55	2.750	69,8	1 10	737
HBM45	45	2.454	62,33	2.875	73,0	1 10	737
HBM46	46	2.501	63,52	3.000	76,2	1 11	766
HBM50	50	2.700	68,58	3.125	79,4	2 1	935
HBM54	54	2.894	73,51	3.250	82,5	2 7	1105





"HEAVY DUTY" SOCKET ACCESSORIES

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

BAR HANDLE

No. H55

For use with No. H63 short "T" adaptor.
Size 18" $\times$ 1 $\frac{1}{16}$ " (457 $\times$ 20,63 mm)

Weight 2 lb. 10 oz. each
1190 g.

SHORT "T" ADAPTOR

No. H63

When combined with No. H55 bar handle, either a short "T" or offset handle is formed.
Length 3 $\frac{1}{8}$ " (79 mm)

Weight 11 $\frac{1}{2}$ oz. each
326 g.

SLIDING OFFSET HANDLE

Combination of H55 and H63

Weight 3 lb. 5 $\frac{1}{2}$ oz. each
1517 g.

RATCHET HANDLE

No. H73

All moving parts totally enclosed. Use No. H81 coupler to connect to sockets or extensions. To reverse, turn the ratchet over.

Length 16 $\frac{1}{2}$ " (419 mm) 16 teeth

Spare parts available, see page 78.

Weight 4 lb. 9 oz. each.
2069 g.

RATCHET HANDLE

No. H74

All moving parts totally enclosed. Instant change-over without removing the socket. The extra long bar handle gives adequate leverage and is detachable.

Overall length 19 $\frac{1}{4}$ " (489 mm.) 20 teeth.

Spare parts available, see page 78.

Weight 5 lb. each.
2268 g.

RATCHET UNIT

No. H76

Will be found extremely efficient used in conjunction with swivel handle, extensions, sliding offset handle and No. HV T5000/RR torque wrench. Instantly reversed by thumb lever without removing the socket.

Length 3 $\frac{7}{8}$ " (98 mm.) 40 teeth.

Diameter 2 $\frac{1}{2}$ " (63,5 mm.) Weight 3 lb. 1 oz. each.
1389 g.

COUPLER

No. H81

For use with No. H73 ratchet handle.

Length 1 $\frac{7}{8}$ " (48 mm.) Weight 4 oz. each.
113 g.

SWIVEL HANDLE

No. H85

With hinged link permitting operation at varying angles. There is neither a bar hole nor a square socket in the head.

Length 18" (457 mm.) Weight 3 lb. 2 oz. each.
1418 g.

UNIVERSAL JOINT

No. H91

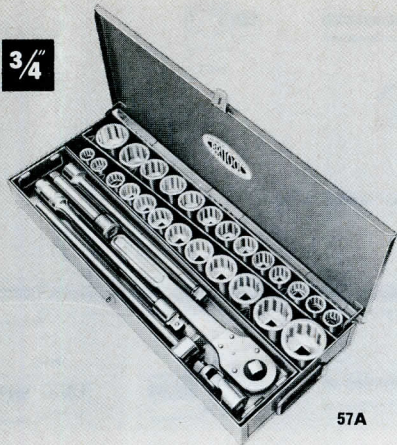
Can be used in any position in an assembly. Short coupled.

Length 4" (102 mm.) Weight 1 lb. each.
454 g.

EXTENSIONS

Used in conjunction with No. H63 adaptor or together where longer reach is required. The head has a square socket but does not contain a bar hole.

No.	Length		Shank Dia.		Weight Each	
	in.	mm.	in.	mm.	lb. oz.	g.
H96	3	76	1	25,4	13	368
H82	8	203	1	25,4	1 14	851
H83	16	406	1	25,4	3 6	1531

3/4"**57A****3/4" SQUARE DRIVE**

"HEAVY DUTY" SOCKET SETS

This range of "Heavy Duty" series socket sets is ideal for servicing operations in the larger hexagon sizes found on heavy transport of all kinds and industrial machinery.

Contained in steel cases, red hammer finish, with folding carrying handle and complete with padlock and keys.

Nos. 50A, 52A and 58A:—

Size: 20" × 7 3/4" × 3 1/8" (508 × 197 × 79 mm.)

Nos. 51A, 53A, 55A, 56A, 57A, 59B

Size: 26 1/2" × 10 1/2" × 3 3/4" (673 × 267 × 95 mm.)

SPECIFICATION

6 Accessories as follows:—

H55 Bar Handle. **H63** Short 'T' Adaptor. **H73** Ratchet Handle. **H81** Coupler. **H82** 8" Extension. **H83** 16" Extension

SET No. 50A

6 Accessories as specified. 8 Bihexagon Sockets.

Whitworth sizes: 7/16", 5/8", 1 1/16", 3/4", 1 1/8", 7/8", 1 1/4", 1".

Weight **28 lb. 8 oz.** per set.
12927 g.

SET No. 52A

6 Accessories as specified. 8 Bihexagon Sockets.

American sizes: 1 1/16", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 2" Across Flats.

Weight **30 lb.** per set.
13608 g.

SET No. 53A

6 Accessories as specified. 11 Bihexagon Sockets.

Unified sizes: 7/8", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 1 7/8", 1 1/2", 1 5/8", 1 3/4", 2" Across Flats.

Weight **41 lb.** per set.
18598 g.

SET No. 58A

6 Accessories as specified. 10 Bihexagon Sockets.

Metric sizes: 26-27-29-30-32-35-36-38-41-42 mm. Across flats.

Weight **31 lb. 4 oz.** per set.
14289 g.

SET No. 51A

6 Accessories as specified. 16 Bihexagon Sockets.

Whitworth sizes: 7/16", 5/8", 1 1/16", 3/4", 1 1/8", 7/8", 1 1/4", 1 1/2", 1 3/4", 1 7/8", 1 1/2", 1 5/8", 1 3/4", 2" Across Flats.

American sizes: 1 1/16", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 2" Across Flats.

Weight **46 lb.** per set.
20862 g.

SPECIFICATION

8 Accessories as follows:— **H55** Bar Handle. **H63** Short 'T' Adaptor. **H73** Ratchet Handle.

H85 Swivel Handle. **H81** Coupler. **H82** 8" Extension. **H83** 16" Extension. **H91** Universal Joint.

SET No. 57A

8 Accessories as specified. 25 Bihexagon Sockets.

Whitworth sizes: 7/16", 1/2", 5/8", 3/4", 1 1/16", 3/4", 1 1/8", 1", 1 1/8", 1 1/4".

American sizes: 7/8", 1 1/8", 1", 1 1/16", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 2" Across Flats.

Weight **61 lb.** per set.
27670 g.

SET No. 59B

8 Accessories as specified. 20 Bihexagon Sockets.

Metric sizes: 22-23-24-26-27-29-30-32-33-35-36-38-39-40-41-42-45-46-50-54 mm.

Weight **59 lb.** per set.
26762 g.

SET No. 56A

8 Accessories as specified. 13 Bihexagon Sockets.

American sizes: 7/8", 1 1/8", 1", 1 1/16", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 2" Across Flats.

Weight **48 lb.** per set.
21775 g.

SET No. 55A

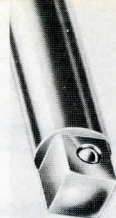
8 Accessories as specified. 12 Bihexagon Sockets.

Whitworth sizes: 7/16", 1/2", 5/8", 3/4", 1 1/16", 3/4", 1 1/8", 1", 1 1/8", 1 1/4".

Weight **49 lb.** per set.
22225 g.

1" SQUARE DRIVE "GIANT" SOCKETS-HEXAGON

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.
Dimensions conform to B.S. 4006:1966.



1"

BRITISH SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	in.	mm.	in.	mm.	lb. oz.	g.
GH1300	1.300	3/4	7/8	1.960	49,78	2.562	65,1	1 6	624
GH1480	1.480	7/8	1	2.186	55,52	2.687	68,3	1 8	681
GH1574	1.574	15/16	1 1/16	2.310	58,67	2.750	69,8	1 11	766
GH1670	1.670	1	1 1/8	2.425	61,59	2.875	73,0	1 14	851
GH1860	1.860	1 1/8	1 1/4	2.662	67,61	3.062	77,8	2 2	964
GH2050	2.050	1 1/4	1 1/2	2.900	73,66	3.250	82,5	2 12	1247
GH2220	2.220	1 1/2	1 5/8	3.110	78,99	3.375	85,7	3 14	1758
GH2410	2.410	1 5/8	1 3/4	3.350	85,09	3.562	90,5	3 10	1644
GH2580	2.580	1 3/4	2	3.564	90,52	3.687	93,7	4 4	1927
GH2760	2.760	1 7/8	2 1/4	3.789	96,24	3.875	98,4	4 14	2211
GH3150	3.150	2	2 1/2	4.277	108,63	4.125	104,8	6 10	3005



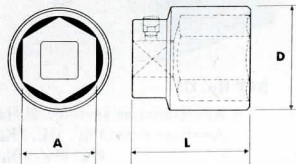
UNIFIED AND AMERICAN SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	lb. oz.	g.
			Bolt dia. and Series	Nut Size and Series						
GH1312	1 3/16	—	7/8N	7/8N	1.978	50,24	2.562	65,1	1 5	596
GH1375	1 1/8	—	—	—	2.054	52,17	2.562	65,1	1 5	596
GH1437	1 1/16	1	—	7/8H	2.133	54,18	2.625	66,7	1 8	681
GH1500	1 1/2	—	1N	1N	2.211	56,16	2.687	68,3	1 10	736
GH1625	1 5/8	1 1/8	1H	1H	2.369	60,17	2.812	71,4	1 12	794
GH1687	1 11/16	—	1 1/8N	1 1/8N	2.445	62,10	2.875	73,0	1 13	822
GH1750	1 3/4	—	—	—	2.523	64,08	2.937	74,6	1 15	879
GH1812	1 13/16	1 1/4	1 1/8H	1 1/8H	2.602	66,09	3.000	76,2	2 1	935
GH1875	1 7/8	—	—	—	2.681	68,10	3.062	77,8	2 3	992
GH2000	2	1 3/8	1 1/4H	1 1/4H	2.837	72,06	3.187	81,0	2 6	1077
GH2062	2 1/16	—	1 3/8N	1 3/8N	2.915	74,04	3.250	82,5	2 10	1190
GH2125	2 1/8	—	—	—	2.992	76,00	3.312	84,1	2 12	1247
GH2187	2 3/16	1 1/2	1 3/8H	1 3/8H	3.073	78,05	3.312	84,1	2 13	1275
GH2250	2 1/4	—	—	—	3.150	80,01	3.437	87,3	3 2	1418
GH2375	2 5/8	—	1 1/2H	1 1/2H	3.306	83,97	3.500	88,9	3 7	1559
GH2500	2 1/2	—	—	—	3.462	87,93	3.625	92,1	3 12	1701
GH2562	2 5/16	—	—	1 5/8H	3.540	89,92	3.687	93,7	4 14	2211
GH2625	2 7/8	—	—	—	3.620	91,95	3.750	95,2	4 4	1927
GH2750	2 3/4	—	1 3/4H	1 3/4H	3.775	95,88	3.875	98,4	5 0	2268
GH2937	2 15/16	—	—	—	4.011	101,88	4.062	103,2	5 12	2608
GH3125	3 1/8	—	2H	2H	4.242	107,75	4.125	104,8	6 8	2949

METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	lb. oz.	g.
GHM36	36	2.108	53,54	2.562	65,1	1 7	652
GHM41	41	2.354	59,79	2.812	71,4	1 12	794
GHM46	46	2.602	66,09	3.000	76,2	2 2	964
GHM50	50	2.794	70,97	3.187	81,0	2 8	1134
GHM55	55	3.043	77,29	3.312	84,1	2 13	1275
GHM60	60	3.291	83,59	3.500	88,9	3 4	1474
GHM65	65	3.536	89,81	3.687	93,7	3 14	1758
GHM70	70	3.782	96,06	3.875	98,4	5 2	2325
GHM75	75	4.028	102,31	4.125	104,8	6 0	2722
GHM80	80	4.277	108,63	4.125	104,8	6 8	2949

Fitted with plunger release for easy disengagement of accessories.

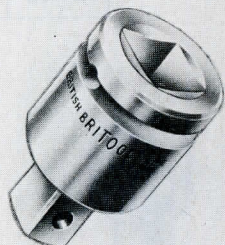
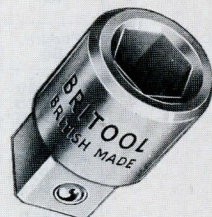
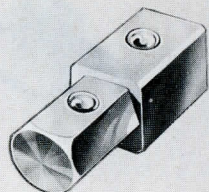


BRITTOOL

CONVERTORS - HAND

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

No.	Specification in.	Overall Length		Weight per 10	
		in.	mm.	lb. oz.	g.
*DPAS	1/4 Sq. Plug x 3/8 Sq. Socket	1 1/4	31,7	13	368
DPDP	1/4 Sq. Plug x 1/4 Sq. Plug	7/8	22,2	3	85
DPDS	1/4 Sq. Plug x 1/4 Sq. Socket	1 1/8	27,0	7	198
DPMP	1/4 Sq. Plug x 3/32 Sq. Plug	1 5/16	23,8	3	85
DPMS	1/4 Sq. Socket x 3/32 Sq. Socket	1 1/8	28,6	7	198
DSAP	1/4 Sq. Socket x 3/8 Sq. Plug	1 1/8	27,0	7	198
DSDS	1/4 Sq. Socket x 1/4 Sq. Socket	7/8	22,2	7	198
DSMP	1/4 Sq. Socket x 1/2 Sq. Plug	1	25,4	6	170
DSMS	1/4 Sq. Socket x 3/32 Sq. Socket	7/8	22,2	9	255
MPAP	3/32 Sq. Plug x 3/8 Sq. Plug	1 1/8	28,6	5	142
*MPAS	3/32 Sq. Plug x 3/8 Sq. Socket	1 1/4	31,7	12	340
MPOP	3/32 Sq. Plug x 448 Hex. Plug	1	25,4	6	170
MSAP	3/32 Sq. Socket x 3/8 Sq. Plug	1 3/16	30,2	10	283
MSEP	3/32 Sq. Socket x 1/2 Sq. Plug	1 1/32	34,1	15	425
MSOP	3/32 Sq. Socket x 448 Hex. Plug	1 1/4	31,7	10	283
ADDP	3/8 Sq. Plug x 1/4 Sq. Plug	1 1/8	23,8	6	170
APEP	3/8 Sq. Plug x 1/2 Sq. Plug	1 1/8	28,6	9	255
*APES	3/8 Sq. Plug x 1/2 Sq. Socket	1 3/16	36,5	1 8	681
APOP	3/8 Sq. Plug x 448 Hex. Plug	1 1/8	27,0	10	283
*APOS	3/8 Sq. Plug x 448 Hex. Socket	1 1/8	35,0	1 1	482
ASOP	3/8 Sq. Socket x 448 Hex. Plug	1 15/32	37,3	1 0	452
ASEP	3/8 Sq. Socket x 1/2 Sq. Plug	1 15/32	37,3	1 2	511
OPEP	448 Hex. Plug x 1/2 Sq. Plug	1 1/4	31,7	13	368
*OPES	448 Hex. Plug x 1/2 Sq. Socket	1 15/32	37,3	1 7	652
OSEP	448 Hex. Socket x 1/2 Sq. Plug	1 3/8	39,7	1 10	737
EPHP	1/2 Sq. Plug x 3/4 Sq. Plug	1 11/32	34,1	1 6	624
*EPHS	1/2 Sq. Plug x 3/4 Sq. Socket	2 3/32	54,8	5 6	2438
ESHP	1/2 Sq. Socket x 3/4 Sq. Plug	1 11/16	42,9	2 10	1190
HPGP	3/4 Sq. Plug x 1 Sq. Plug	2	50,8	3 14	1758
*HPGS	3/4 Sq. Plug x 1 Sq. Socket	2 3/4	69,8	11 1	5018
HSGP	3/4 Sq. Socket x 1 Sq. Plug	2 11/32	59,5	7 2	3232



CONVERTORS - IMPACT

For use with impact sockets (see pages 62-69).

Made from Chrome Alloy Steel. Black rustproof finish.

No.	Specification in.	Overall Length		Weight Each	
		in.	mm.	lb. oz.	g.
ESFP	1/2 Sq. Socket x 3/4 Sq. Plug	2	50,8	5	142
*P/EPHS	1/2 Sq. Plug x 3/4 Sq. Socket	2 1/2	63,5	13	368
*P/FPGS	5/8 Sq. Plug x 1 Sq. Socket	2 27/32	67,5	1 4	567
*P/EPHS	5/8 Sq. Plug x 3/4 Sq. Socket	2 1/2	63,5	14	397
P/FSFP	5/8 Sq. Socket x 1/2 Sq. Plug	2	50,8	7	198
P/FSHP	5/8 Sq. Socket x 3/4 Sq. Plug	2 1/4	57,1	8	227
*P/HPGS	3/4 Sq. Plug x 1 Sq. Socket	2 11/16	71,4	1 3	539
P/HSGP	3/4 Sq. Socket x 1 Sq. Plug	2 11/16	74,6	1 2	511

IMPORTANT: ALL CONVERTORS MARKED * ARE NOT GUARANTEED.

UNIVERSAL STUD EXTRACTORS

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

Black rustproof wheel.

1/4" SQUARE DRIVE

Flush base wheel

No. D90 Capacity 1/8"-3/8" (3,17-9,52 mm.) dia.
Weight 3 3/4 oz. each.
106 g.

3/8" SQUARE DRIVE

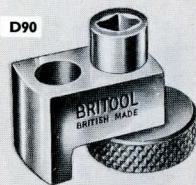
Three-position wheel

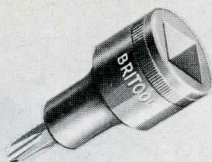
No. A92 Capacity 5/16"-5/8" (7,94-14,29 mm.) dia.
Boxed quantity—5
Weight 3 lb. boxed.
1361 g.

1/2" SQUARE DRIVE

Three-position wheel

No. E92 Capacity 3/16"-3/4" (7,94-19,05 mm.) dia.
Boxed quantity—5
Weight 3 lb. boxed.
1361 g.





BIT ADAPTORS

FOR USE WITH RECESSED HEAD SCREWS

Can be used with socket accessories or torque wrenches.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

Pozidriv bits—blue coated finish.

Interchangeable Phillips bits (bit only) are available.

No.	Square Drive	Point Size	Overall Length		Boxed Quantity Complete Adaptor	Weight Boxed or Each		Part No. Bit Only		Boxed Quantity Bit Only
			in.	mm.		lb. oz.	g.	Phillips	Pozidriv	
D31 1PZD	1/4	1	1 1/2	38	—	1/2	14	PSB1	1PZD	12
D31 2PZD	1/4	2	1 1/2	38	—	1/2	14	PSB2	2PZD	12
D31 3PZD	1/4	3	1 1/2	38	—	1/2	14	PSB3	3PZD	12
A31 1PZD	3/8	1	1 5/8	41	5	9	255	PSB1	1PZD	12
A31 2PZD	3/8	2	1 5/8	41	5	9	255	PSB2	2PZD	12
A31 3PZD	3/8	3	1 5/8	41	5	9	255	PSB3	3PZD	12
A32 4PZD	3/8	4	1 5/8	41	5	9	255	PSB4	4PZD	12
E31 1PZD	1/2	1	2	51	5	1 0	454	PSB1	1PZD	12
E31 2PZD	1/2	2	2	51	5	1 0	454	PSB2	2PZD	12
E31 3PZD	1/2	3	2	51	5	1 0	454	PSB3	3PZD	12
E32 4PZD	1/2	4	2 1/4	57	5	1 0	454	PSB4	4PZD	12

HEXAGON BIT ADAPTORS

FOR USE WITH SOCKET SCREWS

Can be used with socket accessories or torque wrenches.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

Black rustproof bits.



No.	Hexagon Bit Size Across Flats	Square Drive	Overall Length		Boxed Quantity Complete Adaptor	Weight Boxed or Each		Part No. Hexagon Bit Only
			in.	mm.		lb. oz.	g.	
D33 093	3/32"	1/4	1 5/8	33	—	1/2	14	CSB093
D33 3M	3 mm.	1/4	1 5/8	33	—	1/2	14	CSB3M
D33 125	1/8"	1/4	1 5/8	33	—	1/2	14	CSB125
D33 156	5/32"	1/4	1 5/8	38	—	1/2	14	CSB156
D33 4M	4 mm.	1/4	1 5/8	38	—	1/2	14	CSB4M
D33 187	3/16"	1/4	1 5/8	41	—	1/2	14	CSB187
D33 5M	5 mm.	1/4	1 5/8	41	—	3/4	21	CSB5M
D33 218	7/32"	1/4	1 11/16	43	—	3/4	21	CSB218
D33 6M	6 mm.	1/4	1 3/4	44	—	1	28	CSB6M
D33 250	1/4"	1/4	1 7/8	48	—	1	28	CSB250
A33 3M	3 mm.	3/8	1 5/8	41	5	6	170	CSB3M
A33 125	1/8"	3/8	1 5/8	41	5	6	170	CSB125
A33 156	5/32"	3/8	1 5/8	44	5	6	170	CSB156
A33 4M	4 mm.	3/8	1 5/8	44	5	6	170	CSB4M
A33 187	3/16"	3/8	1 5/8	48	5	6	170	CSB187
A33 5M	5 mm.	3/8	1 7/8	48	5	7	198	CSB5M
A33 218	7/32"	3/8	1 11/16	49	5	7	198	CSB218
A33 6M	6 mm.	3/8	2	51	5	9	255	CSB6M
A33 250	1/4"	3/8	2 1/16	52	5	9	255	CSB250
A33 312	5/16"	3/8	2 1/8	59	5	11	312	CSB312
A33 8M	8 mm.	3/8	2 5/16	59	5	11	312	CSB8M
A33 375	3/8"	3/8	2 5/16	59	5	12	340	CSB375
A33 10M	10 mm.	3/8	2 5/16	59	5	12	340	CSB10M
E33 187	3/16"	1/2	2 1/4	57	5	14	397	CSB187
E33 5M	5 mm.	1/2	2 1/4	57	5	14	397	CSB5M
E33 218	7/32"	1/2	2 5/16	59	5	14	397	CSB218
E33 6M	6 mm.	1/2	2 5/16	59	5	14	397	CSB6M
E33 250	1/4"	1/2	2 7/16	62	5	14	397	CSB250
E33 312	5/16"	1/2	2 1/2	64	5	1 5	596	CSB312
E33 8M	8 mm.	1/2	2 1/2	64	5	1 5	596	CSB8M
E33 375	3/8"	1/2	2 1/2	64	5	1 6	624	CSB375
E33 10M	10 mm.	1/2	2 1/2	64	5	1 6	624	CSB10M
E33 12M	12 mm.	1/2	2 1/2	64	5	1 8	681	CSB12M
E33 500	1 1/2"	1/2	3 1/16	78	5	1 10	737	CSB500
E33 14M	14 mm.	1/2	3 1/16	78	5	2 4	1020	CSB14M
E33 562	3/16"	1/2	3 1/16	78	5	2 4	1020	CSB562

CROWFOOT WRENCHES-BIHEXAGON

For torque wrench application a special 6" (152 mm.) extension enables the square drive and bihexagon to be on the same centre line.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

THE ABC SERIES 3/8" SQUARE DRIVE THE EBC SERIES 1/2" SQUARE DRIVE

BRITISH, UNIFIED AND AMERICAN SIZES

No.	Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Ring Diameter		T Nominal Ring Thickness		C Centre of Ring to centre of Square		Weight per 10	
		Whit.	B.S.	in.	mm.	in.	mm.	in.	mm.	lb. oz.	g.
ABC324	.324	2 B.A.	—	.543	13.79	5/16	7.9	13/16	20.6	9	255
ABC445	.445	1/4	1/4	.697	17.70	5/16	7.9	13/16	20.6	9	255
ABC525	.525	5/16	5/16	.822	20.88	5/16	7.9	7/8	22.2	10	283
ABC600	.600	3/8	3/8	.916	23.27	3/8	9.5	7/8	22.2	12	340
ABC710	.710	3/8	7/16	1.075	27.30	7/16	11.1	15/16	23.8	15	425
ABC820	.820	7/16	1/2	1.226	31.14	7/16	11.1	1	25.4	1 1	482
EBC445	.445	3/16	1/4	.687	17.45	3/16	7.9	13/16	20.6	1 0	454
EBC525	.525	5/16	5/16	.804	20.42	5/16	7.9	7/8	22.2	1 2	511
EBC600	.600	3/8	3/8	.906	23.01	3/8	9.5	7/8	22.2	1 3	539
EBC710	.710	3/8	7/16	1.065	27.05	7/16	11.1	15/16	23.8	1 6	624
EBC820	.820	7/16	1/2	1.216	30.89	1/2	12.7	1	25.4	1 9	709
EBC920	.920	1/2	1/2	1.355	34.42	1/2	14.3	1 1/16	27.0	1 15	879
EBC1010	1.010	5/8	5/8	1.486	37.74	5/8	15.9	1 5/8	28.6	2 3	992
EBC1100	1.100	3/4	1 1/16	1.610	40.89	3/4	15.9	1 7/8	30.2	2 8	1134
		S.A.E. Unified									
ABC437	7/16	1/4	1/4 N	.697	17.70	3/16	7.9	13/16	20.6	9	255
ABC500	1/2	5/16	5/16 N	.822	20.88	3/16	7.9	7/8	22.2	10	283
ABC562	5/8	3/8	3/8 N	.916	23.27	3/8	9.5	7/8	22.2	13	368
ABC625	3/4	7/16	7/16 N	.968	24.61	7/16	11.1	15/16	23.8	15	425
ABC687	11/16	1/2	1/2 N	1.075	27.30	7/16	11.1	15/16	23.8	1 0	454
ABC750	3/4	1/2	1/2 N	1.150	29.21	7/16	11.1	1	25.4	1 1	482
ABC812	13/16	—	7/16 N	1.226	31.14	7/16	11.1	1	25.4	1 1	482
EBC437	7/16	1/4	1/4 N	.687	17.45	3/16	7.9	13/16	20.6	1 1	482
EBC500	1/2	5/16	5/16 N	.804	20.42	3/16	7.9	7/8	22.2	1 2	511
EBC562	5/8	3/8	3/8 N	.906	23.01	3/8	9.5	7/8	22.2	1 2	511
EBC625	3/4	7/16	7/16 N	1.065	27.05	7/16	11.1	15/16	23.8	1 8	681
EBC687	11/16	1/2	1/2 N	1.065	27.05	7/16	11.1	15/16	23.8	1 6	624
EBC750	3/4	1/2	1/2 N	1.216	30.89	1/2	12.7	1	25.4	1 11	766
EBC812	13/16	—	7/16 N	1.216	30.89	1/2	12.7	1	25.4	1 11	766
EBC875	7/8	3/4	3/4 N	1.355	34.42	3/4	14.3	1 1/16	27.0	2 1	935
EBC937	15/16	5/8	5/8 N	1.355	34.42	3/4	14.3	1 1/16	27.0	2 1	935
EBC1000	1	11/16	11/16 N	1.486	37.74	5/8	15.9	1 5/8	28.6	2 6	1077
EBC1062	1 1/16	3/4	3/4 N	1.610	40.89	5/8	15.9	1 7/8	30.2	2 10	1190

No. A58 6" (152 mm.) special extension. Complete with sliding adaptor as illustrated. Weight 6 oz. each. 170 g.

No. E58 6" (152 mm.) special extension. Complete with sliding adaptor as illustrated. Weight 12 oz. each. 340 g.

3/8" SQUARE DRIVE

SETS

Contained in steel case, red hammer finish.

SPECIFICATION 2 Accessories as follows:— A56 Bar Handle. A58 6" Extension. Size: 8 1/4" x 3 1/4" x 1" (209 x 82 x 25 mm.)

SET No. 2350 2 Accessories as specified. 5 Bihexagon Crowfoot Wrenches. Weight 2 lb. 7 oz. per set. 1105 g.

SET No. 2351 2 Accessories as specified. 7 Bihexagon Crowfoot Wrenches. Weight 2 lb. 8 oz. per set. 1133 g.

SET No. 2352 2 Accessories as specified. 12 Bihexagon Crowfoot Wrenches. Weight 3 lb. 2 oz. per set. 1418 g.

1/2" SQUARE DRIVE

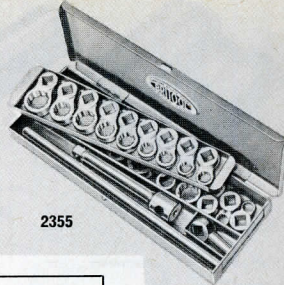
SPECIFICATION 2 Accessories as follows:— E56 Bar Handle. E58 6" Extension. Size: 12 1/2" x 4 3/8" x 1 1/2" (317 x 111 x 38 mm.)

SET No. 2353 2 Accessories as specified. 8 Bihexagon Crowfoot Wrenches. Weight 5 lb. per set. 2268 g.

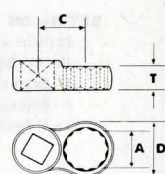
SET No. 2354 2 Accessories as specified. 11 Bihexagon Crowfoot Wrenches. Weight 5 lb. 8 oz. per set. 2495 g.

SET No. 2355 2 Accessories as specified. 19 Bihexagon Crowfoot Wrenches. Whitworth sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4", 7/8", 15/16", 1", 1 1/16" Across Flats. American sizes: 3/16", 1/2", 5/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/16" Across Flats.

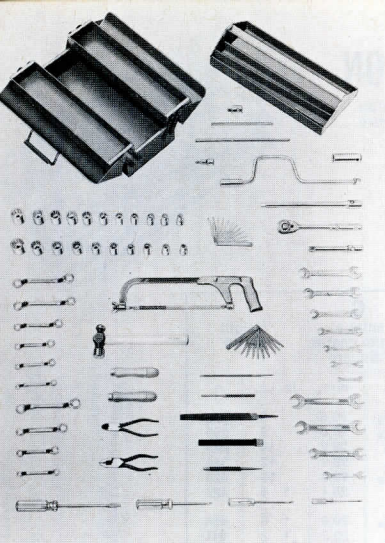
Weight 7 lb. per set. 3175 g.



2355



MECHANIC'S TOOLKITS



These toolkits contain an assortment of socket wrenches, accessories, ring wrenches, open jaw wrenches and supplementary tools carefully selected to give the Automobile and General Mechanic a comprehensive basic set of top quality equipment which will meet his immediate needs for servicing and repairs.

Each kit is housed in a cantilever type toolbox with single full-width lower compartment, two half-width hinged compartments, and removable tote-tray. The carrying handles incorporate a locking device and will fold flat if required.

Overall size: $18\frac{3}{4}'' \times 8\frac{3}{8}'' \times 9\frac{1}{4}''$, handles folded flat
(476 × 213 × 235 mm.).

SPECIFICATION

The following 23 items are included in all kits.

$\frac{1}{2}$ " Square Drive Accessories:—Ratchet Handle, Speed Brace, Bar Handle $\frac{1}{2}'' \times 12''$, Short "T" Adaptor, 6" and 12" Extensions, Pozidriv Bit Adaptor No. 4 Point.

Supplementary Tools:—6" Sidecutting Nippers, 6" Combination Pliers, $\frac{3}{4}$ lb. Ball Pein Hammer, $\frac{3}{4}'' \times 7''$ Chisel $6'' \times \frac{3}{8}'' \times \frac{5}{32}''$ diameter Punch, Magneto File, 6" Round File, 8" Flat File, File Handles (2), Hacksaw Frame with Blade, Screwdrivers $2\frac{1}{2}'' \times \frac{1}{8}''$ blade, $4'' \times \frac{3}{16}''$ blade, $6'' \times \frac{3}{16}''$ blade, $4'' \times$ No. 2 Phillips Point, 14 mm. Spark Plug Socket. (EDH812).

SET No. 240 American/Unified Sizes only. 42 pieces.

23 items as specified above together with the following:—

10— $\frac{1}{2}$ " Square Drive Bi-hexagon Sockets: $\frac{1}{16}''$, $\frac{1}{8}''$, $\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, $\frac{11}{16}''$ Across Flats.

4—Engineers Open Jaw Wrenches: $\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{1}{16}'' \times \frac{1}{16}''$ Across Flats.

4—Bi-hexagon MINI-RING Wrenches: $\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{1}{16}'' \times \frac{1}{16}''$ Across Flats.

1—4" Feeler Gauge Set, 11 Blades, $\frac{1}{2}$ to 25/1,000ths of an inch.

Weight **29 lb. 8 oz.** per set.
13381 g.

SET No. 241 Metric Sizes only. 48 pieces.

23 items as specified above together with the following:—

11— $\frac{1}{2}$ " Square Drive Bi-hexagon Sockets: 10-12-13-14-17-19-21-22-23-24-27 mm.

7—Engineers Open Jaw Wrenches: 6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

6—Bi-hexagon MINI-RING Wrenches: 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

1—4" Feeler Gauge Set, 10 Blades, 5 to 80/100ths of a millimeter.

Weight **30 lb. 8 oz.** per set.
13835 g.

SET No. 242 Whitworth and American/Unified Sizes. 56 pieces.

23 items as specified above together with the following:—

18— $\frac{1}{2}$ " Square Drive Bi-hexagon Sockets: $\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$ Whitworth.
 $\frac{1}{16}''$, $\frac{1}{8}''$, $\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, $\frac{11}{16}''$ Across Flats.

7—Engineers Open Jaw Wrenches: $\frac{1}{8}'' \times \frac{3}{16}''$, $\frac{1}{4}'' \times \frac{3}{16}''$, $\frac{3}{8}'' \times \frac{7}{16}''$ Whitworth.
 $\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{1}{16}'' \times \frac{1}{16}''$ Across Flats.

7—Bi-hexagon MINI-RING Wrenches: $\frac{1}{8}'' \times \frac{3}{16}''$, $\frac{1}{4}'' \times \frac{3}{16}''$, $\frac{3}{8}'' \times \frac{7}{16}''$ Whitworth.
 $\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{1}{16}'' \times \frac{1}{16}''$ Across Flats.

1—4" Feeler Gauge Set, 11 Blades, $\frac{1}{2}$ to 25/1,000ths of an inch.

Weight **32 lb. 8 oz.** per set.
14742 g.

SET No. 243 Metric and American/Unified Sizes. 67 pieces.

23 items as specified above together with the following:—

21— $\frac{1}{2}$ " Square Drive Bi-hexagon Sockets: 10-12-13-14-17-19-21-22-23-24-27 mm.

$\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, $\frac{11}{16}''$ Across Flats.

11—Engineers Open Jaw Wrenches: 6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

$\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{1}{16}'' \times \frac{1}{16}''$ Across Flats.

10—Bi-hexagon MINI-RING Wrenches: 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

$\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{1}{16}'' \times \frac{1}{16}''$ Across Flats.

1—4" Feeler Gauge Set, 11 Blades, $\frac{1}{2}$ to 25/1,000ths of an inch.

1—4" Feeler Gauge Set, 10 Blades, 5 to 80/100ths of a millimeter.

Weight **34 lb. 8 oz.** per set.
15649 g.



1/2" SQUARE DRIVE

MAINTENANCE TOOLKITS

A comprehensive assortment of socket wrenches and accessories, combination wrenches, and supplementary tools specially assembled to meet the needs of maintenance engineers engaged in industry and transport.

Three specifications are available, each contained in a cantilever type toolbox with single full-width lower compartment, two half-width hinged compartments, and removable tote-tray. The carrying handles incorporate a locking device and will fold flat if required.

Overall size: $18\frac{3}{4}" \times 8\frac{3}{8}" \times 9\frac{1}{4}"$, handles folded flat
(476 × 213 × 235)mm.

SPECIFICATION

The following 27 items are included in all kits.

1/2" Square Drive Accessories:— Speed Brace, Bar Handle 1/2" × 12", Sliding Offset Handle, Ratchet Handle, Swivel Handle (15"), Universal Joint, 3", 6" and 12" Extensions.

Supplementary Tools:— Electricians Screwdrivers 2" and 4" blade, Engineers Screwdrivers 4", 6" (Square) and 10" blade, Phillips Screwdrivers 4" × No. 2 point and 6" × No. 3 point, 8" Combination Pliers, 8" Snipe Nose Pliers, 6" Sidecutting Nippers, 9 1/2" Slip Joint Universal Pliers, Chisels 3/4" × 7" and 7/16" × 5", Nail Punch 6" × 3/16", Hacksaw Frame with Blade, Ball Pein Hammer 1 lb., Plastic Head Mallet, 14 mm. Sparking Plug Socket. (EDH812).

SET No. 244 American/Unified Sizes only. 64 pieces.

27 items as specified above together with the following:—

14—1/2" Square Drive Bihexagon Sockets: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 1/4" Across Flats.

12—Combination Wrenches: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16" Across Flats.

1—4" Feeler Gauge Set, 11 Blades, 1/2 to 25/1,000ths of an inch.

10—Allen Keys: 1/16", 3/64", 7/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8" Across Flats.

Weight 37 lb. per set.

16783 g.

SET No. 245 Metric Sizes only. 69 pieces.

27 items as specified above together with the following:—

16—1/2" Square Drive Bihexagon Sockets: 10–11–12–13–14–15–16–17–19–21–22–24–27–28–30–32 mm.

16—Combination Wrenches: 6–7–8–9–10–11–12–13–14–15–16–17–19–21–22–24 mm.

1—4" Feeler Gauge Set, 10 Blades, 5 to 80/100ths of a millimeter.

9—Allen Keys: 1.5–2–2.5–3–4–5–6–8–10 mm.

Weight 40 lb. per set.

18144 g.

SET No. 246 Whitworth/B.S. and American/Unified Sizes. 83 pieces.

27 items as specified above together with the following:—

24—1/2" Square Drive Bihexagon Sockets: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4" Whitworth.

3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 1/4" Across Flats.

21—Combination Wrenches: 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" Whitworth.
4.2 BA.

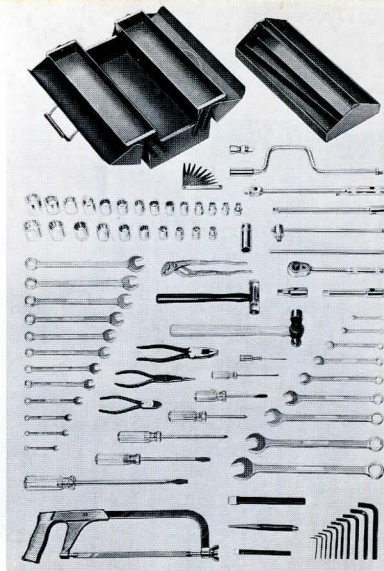
1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16" Across Flats.

1—4" Feeler Gauge Set, 11 Blades, 1/2 to 25/1,000ths of an inch.

10—Allen Keys: 1/16", 3/64", 7/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8" Across Flats.

Weight 44 lb. per set.

19958 g.



TRACTOR SERVICE SETS

Heavy tractors, bulldozers, earth movers and similar equipment require servicing tools with exceptional qualities of endurance.

These sets contain high grade tools of most robust design combined with thin wall sockets and small outside diameter ring wrenches which, in the smaller sizes are the only types suitable for servicing "Caterpillar" and similar plant.

They are available in specifications which cover British, American and Metric sizes as detailed.

497C

UNIFIED AND AMERICAN SIZES

SET No. 497C American and Unified sizes. 100 pieces. Comprises the following tool equipment housed in a specially designed steel case, red hammer finish, with double security locking device and keys.
Size: 22" x 12 1/2" x 9 5/8" (559 x 317 x 244 mm.)

One each Bi-hexagon Socket Wrenches and parts:—

1/2" Square Drive Sockets, 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1" Across Flats.

1/2" Square Drive Accessories:— Universal Joint, 6" and 12" Extensions, Speed Brace, Swivel Handle, Offset Handle, Ratchet Handle, Stud Extractor, Pozidriv Bit Adaptor No. 4 point.

3/4" Square Drive Sockets, 15/16", 1", 1 1/16", 1 1/8", 1 1/4", 1 5/16", 1 1/2", 1 5/8", 1 11/16", 1 3/4", 1 7/8", 2" Across Flats.

3/4", Square Drive Accessories:— Short "T" Adaptor and Bar, Ratchet Handle with Coupler, 8" Extension.

Bi-hexagon Ring Wrenches, 3/8" x 7/16", 1/2" x 9/16", 5/8" x 11/16", 3/4" x 7/8", 25/32" x 13/16", 15/16" x 1", 1 1/16" x 1 1/8", 1 1/4" x 1 1/16" Across Flats.

Open Jaw Double Ended Engineers' Wrenches, 3/8" x 7/16", 7/16" x 1/2", 9/16" x 5/8", 11/16" x 13/16", 3/4" x 7/8", 15/32" x 25/32", 15/16" x 1", 1 1/16" x 1 1/8", 1 1/8" x 1 1/4" Across Flats.

1/2" Square Drive Deep Socket for 14 mm. Sparking Plugs (EDH812).

Miscellaneous tools:— 1 each.

Centre Punch, Nail Punches 12" x 3/4", 8" x 3/8", 6" x 3/16", 14" Stillson pattern Wrench, Chisel Knife, Hacksaw Frame, 11" Heavy Tinsnips, 18 blade Feeler Gauge, 12" Flat File, 10" Round File, 8" Square File, File Handles (3), 8" Snipe Nose Pliers, 6" Sidecutting Nippers, 8" Combination Pliers, 9 1/2" Slip Joint Universal Pliers, Engineers' Screwdrivers 12", 6" and 4" blade, Electricians' Screwdriver 2" blade, Phillips Screwdrivers, 3" x No. 1 point, 4" x No. 2 point, 6" x No. 3 point, Flat Chisels 1" x 9", 3/4" x 7", 7/16" x 5", 16" Pry Bars (2), Ball Pein Hammers 2 lb. and 3/4 lb., Allen Keys 1/16", 3/32", 1/8", 5/32", 3/16", 1/2", 5/8", 3/4", 1", 1 1/8", 1 1/4", 1 3/4", 2", Double-ended swivel type Brake Adjuster 1/4" x 3/16" Across Flats Square (No. 216).

Weight 121 lb. per set.
54886 g.

No. 567 Chassis for above with 4 heavy rubber-tyred ball-bearing castors.
This item is an optional extra and is not supplied unless specifically ordered.

Weight 9 lb. each.
4082 g.

TRACTOR SERVICE SETS

BRITISH SIZES

SET No. 498C Whitworth/B.S. sizes. 91 pieces. Comprises the following tool equipment housed in a specially designed steel case, red hammer finish, with double security locking device and keys.
Size: $22'' \times 12\frac{1}{2}'' \times 9\frac{5}{8}''$ (559 $\times$ 317 $\times$ 244 mm.)

One each Bi-hexagon Socket Wrenches and parts:—

$\frac{1}{2}''$ Square Drive Sockets, $\frac{1}{8}''$, $\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$ Whitworth.

$\frac{1}{4}''$ Square Drive Accessories:— Universal Joint, 6" and 12" Extensions, Speed Brace, Swivel Handle, Offset Handle, Ratchet Handle, Stud Extractor, Pozidriv Bit Adaptor No. 4 point.

$\frac{3}{4}''$ Square Drive Sockets, $\frac{5}{8}''$, $\frac{11}{16}''$, $\frac{3}{4}''$, $\frac{13}{16}''$, $\frac{7}{8}''$, $\frac{15}{16}''$, 1", $1\frac{1}{8}''$, $1\frac{1}{4}''$ Whitworth.

$\frac{3}{8}''$ Square Drive Accessories:— Short "T" Adaptor and Bar, Ratchet Handle with Coupler, 8" Extension.

Bi-hexagon Ring Wrenches, $\frac{1}{8}'' \times \frac{3}{16}''$, $\frac{1}{4}'' \times \frac{5}{16}''$, $\frac{3}{8}'' \times \frac{7}{16}''$, $\frac{1}{2}'' \times \frac{9}{16}''$, $\frac{5}{8}'' \times \frac{11}{16}''$, $\frac{3}{4}'' \times \frac{7}{8}''$, $1'' \times 1\frac{1}{8}''$ Whitworth.

Open Jaw Double Ended Engineers' Wrenches, $\frac{1}{8}'' \times \frac{3}{16}''$, $\frac{1}{4}'' \times \frac{5}{16}''$, $\frac{3}{8}'' \times \frac{7}{16}''$, $\frac{1}{2}'' \times \frac{9}{16}''$, $\frac{5}{8}'' \times \frac{11}{16}''$, $\frac{3}{4}'' \times \frac{7}{8}''$, $1'' \times 1\frac{1}{8}''$ Whitworth.

$\frac{1}{4}''$ Square Drive Deep Socket for 14 mm. Sparking Plugs (EDH812).

Miscellaneous tools:— 1 each.

Centre Punch, Nail Punches $12'' \times \frac{3}{4}''$, $8'' \times \frac{3}{8}''$, $6'' \times \frac{1}{8}''$, $14''$ Stillson pattern Wrench, Chisel Knife, Hacksaw Frame, 11" Heavy Tinsnips, 18 blade Feeler Gauge, 12" Flat File, 10" Round File, 8" Square File, File Handles (3), 8" Snipe Nose Pliers, 6" Sidecutting Nippers, 8" Combination Pliers, $9\frac{1}{2}''$ Slip Joint Universal Pliers, Engineer's Screwdrivers 12", 6" and 4" blade, Electrician's Screwdriver 2" blade, Phillips Screwdrivers 3" $\times$ No. 1 point, 4" $\times$ No. 2 point, 6" $\times$ No. 3 point, Flat Chisels 1" $\times$ 9", $\frac{3}{4}'' \times 7''$, $\frac{7}{16}'' \times 5''$, 16" Pry Bars (2), Ball Pein Hammers 2 lb. and $\frac{3}{4}$ lb., Allen Keys $\frac{1}{16}''$, $\frac{5}{64}''$, $\frac{3}{32}''$, $\frac{1}{8}''$, $\frac{5}{32}''$, $\frac{3}{16}''$, $\frac{7}{32}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, Double-ended swivel type Brake Adjuster $\frac{1}{4}'' \times \frac{3}{16}''$ Across Flats Square (No. 216).

Weight 150 lb. per set.
68040 g.

No. 567 Chassis for above with 4 heavy rubber-tyred ball-bearing castors.
This item is an optional extra and is not supplied unless specifically ordered.

Weight 9 lb. each.
4082 g.

METRIC SIZES

SET No. 499C. Metric Sizes. 113 pieces. Comprises the following tool equipment housed in a specially designed steel case, red hammer finish, with double security locking device and keys.
Size: $22'' \times 12\frac{1}{2}'' \times 9\frac{5}{8}''$ (559 $\times$ 317 $\times$ 244 mm.)

One each Bi-hexagon Socket Wrenches and parts:—

$\frac{1}{2}''$ Square Drive Sockets, 10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26 mm.

$\frac{1}{4}''$ Square Drive Accessories:— Universal Joint, 6" and 12" Extensions, Speed Brace, Swivel Handle, Offset Handle, Ratchet Handle, Stud Extractor, Pozidriv Bit Adaptor No. 4 point.

$\frac{3}{4}''$ Square Drive Sockets, 27-29-30-32-35-36-38-40-41-42-46-50 mm.

$\frac{3}{4}''$ Square Drive Accessories: Short "T" Adaptor and Bar, Ratchet Handle with Coupler, 8" Extension.

Bi-hexagon Ring Wrenches, 6 $\times$ 7, 8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19, 20 $\times$ 22, 21 $\times$ 23, 24 $\times$ 26, 25 $\times$ 28, 27 $\times$ 32 mm.

Open Jaw Double Ended Engineers' Wrenches, 6 $\times$ 7, 8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19, 20 $\times$ 21, 22 $\times$ 23, 24 $\times$ 25, 26 $\times$ 27, 28 $\times$ 29, 30 $\times$ 31, 32 $\times$ 35 mm.

$\frac{1}{2}''$ Square Drive Deep Socket for 14 mm. Sparking Plugs (EDH812).

Miscellaneous tools:— 1 each.

Centre Punch, Nail Punches $12'' \times \frac{3}{4}''$, $8'' \times \frac{3}{8}''$, $6'' \times \frac{1}{8}''$, $14''$ Stillson pattern Wrench, Chisel Knife, Hacksaw Frame, 11" Heavy Tinsnips, 18 blade Feeler Gauge, 12" Flat File, 10" Round File, 8" Square File, File Handles (3), 8" Snipe Nose Pliers, 6" Sidecutting Nippers, 8" Combination Pliers, $9\frac{1}{2}''$ Slip Joint Universal Pliers, Engineer's Screwdrivers 12", 6" and 4" blade, Electrician's Screwdriver 2" blade, Phillips Screwdrivers 3" $\times$ No. 1 point, 4" $\times$ No. 2 point, 6" $\times$ No. 3 point, Flat Chisels 1" $\times$ 9", $\frac{3}{4}'' \times 7''$, $\frac{7}{16}'' \times 5''$, 16" Pry Bars (2), Ball Pein Hammers 2 lb. and $\frac{3}{4}$ lb., Allen Keys 1.5-2-2.5-3-4-5-6-8-10 mm.

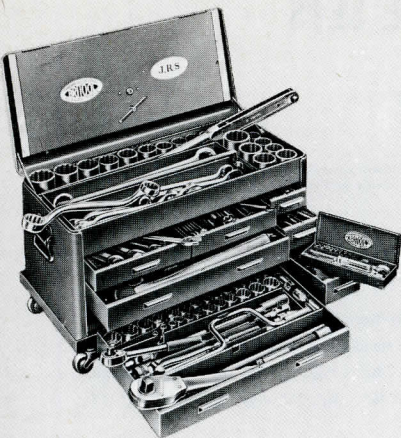
Weight 127 lb. per set.
57607 g.

No. 567 Chassis for above with 4 heavy rubber-tyred ball-bearing castors.
This item is an optional extra and is not supplied unless specifically ordered.

Weight 9 lb. each.
4082 g.



UNIVERSAL SERVICE SETS



Two sets are available, one covering British and American sizes and the other covering Metric sizes.

The wide range of sockets and accessories including $\frac{1}{4}$ ", $\frac{1}{2}$ " and $\frac{3}{4}$ " square drive supplemented by a full assortment of open jaw, ring and other wrenches, provides the user with a most flexible and versatile set which can be relied upon to master all the nut turning operations likely to be encountered.

The case is sturdily constructed in heavy gauge steel and will withstand tough usage.

A detachable 'tote' tray forms part of the box.

A rugged steel chassis fitted with rubber-tyred ball-bearing castors is available as an optional extra.

METRIC SIZES

SET No. 447D Metric Sizes. 153 pieces. Comprises the following tool equipment housed in a specially designed steel case, red hammer finish, with double security locking device and keys.
Size: $27\frac{1}{2}$ " $\times$ $12\frac{1}{2}$ " $\times$ 12" (698 $\times$ 317 $\times$ 305 mm.)

One each Socket Wrenches and parts:—

$\frac{1}{4}$ " Square Drive Hexagon Sockets, 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 mm.

$\frac{1}{4}$ " Square Drive Accessories:—Spinner Handle, Offset Handle, Ratchet Handle, Swivel Handle, Universal Joint, Flexible Extension, 4" and 8" Extensions.

$\frac{1}{2}$ " Square Drive Bi-hexagon Sockets, 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25 - 26 - 27 - 29 - 30 mm.

Deep Socket for 14 mm. Sparking Plugs (EDH812).

$\frac{1}{2}$ " Square Drive Accessories:—Turnscrew Socket Bit, Speed Brace, Bar Handle, Ratchet Handle, Swivel Handle, Universal Joint, 3", 6", 12" and 18" Extensions, Ratchet Unit, Short "T" Adaptor, Stud Extractor, Pozidriv Bit Adaptor No. 4 point.

$\frac{1}{2}$ " Square Drive Socket $\times$ $\frac{3}{4}$ " Square Drive Plug Converter.

$\frac{3}{4}$ " Square Drive Bi-hexagon Sockets, 27 - 29 - 30 - 32 - 35 - 36 - 38 - 40 - 41 - 42 - 46 - 50 mm.

$\frac{3}{4}$ " Square Drive Accessories:—Short "T" Adaptor and Bar, Ratchet Handle with Coupler, 8" Extension.

Ring Wrenches, 5 $\times$ 5.5 - 6 $\times$ 7 - 8 $\times$ 9 - 10 $\times$ 11 - 12 $\times$ 13 - 14 $\times$ 15 - 16 $\times$ 17 - 18 $\times$ 19 - 20 $\times$ 22 - 21 $\times$ 23 - 24 $\times$ 26 - 25 $\times$ 28 - 27 $\times$ 30 - 32 $\times$ 36 mm.

Open Jaw Double Ended Wrenches, 3.2 $\times$ 4 - 5 $\times$ 5.5 - 6 $\times$ 7 - 8 $\times$ 9 - 10 $\times$ 11 - 12 $\times$ 13 - 14 $\times$ 15 - 16 $\times$ 17 - 18 $\times$ 19 - 20 $\times$ 21 - 22 $\times$ 23 - 24 $\times$ 25 - 26 $\times$ 27 - 28 $\times$ 29 - 30 $\times$ 31 - 32 $\times$ 36 mm.

Torque Wrench, 34 - 166 pound-feet (4.7 - 22.9 Kg/m). EVT2000

Miscellaneous tools:—1 each.

Centre Punch, Nail Punches 12" $\times$ $\frac{3}{4}$ ", 8" $\times$ $\frac{3}{8}$ ", 6" $\times$ $\frac{3}{16}$ ", 14" Stillson pattern Wrench, Chisel Knife, Hacksaw Frame, 11" Heavy Tinsnips, 18 blade Feeler Gauge, 12" Flat File, 10" Round File, 8" Square File, File Handles (3), 8" Snipe Nose Pliers, 6" Sidecutting Nippers, 8" Combination Pliers, $\frac{9}{16}$ " Slip Joint Universal Pliers, Engineer's Screwdrivers 12", 6" and 4" blade, Chubby, Electrician's Screwdriver 2" blade, Phillips Screwdrivers 3" $\times$ No. 1 point, 4" $\times$ No. 2 point, 6" $\times$ No. 3 point, Flat Chisels 1" $\times$ 9", $\frac{3}{4}$ " $\times$ 7", $\frac{3}{16}$ " $\times$ 5", 16" Pry Bars (2), Plastic Head Mallet, Ball Pein Hammers, 2 lb. and $\frac{3}{4}$ lb., Allen Keys 1.5-2.5-3-4-5-6-8-10 mm.

Weight 164 lb. per set.
74390 g.

No. 569 Chassis for above with four heavy rubber-tyred ball-bearing castors. This item is an optional extra and is not supplied unless specifically ordered.

Weight 12 lb. each.
5443 g.

UNIVERSAL SERVICE SETS

BRITISH, UNIFIED AND AMERICAN SIZES

SET No. 446C Whitworth/B.S., American and Unified sizes. 215 pieces. Comprises the following tool equipment housed in a specially designed steel case, red hammer finish, with double security locking device and keys.
Size: $27\frac{1}{2}'' \times 12\frac{1}{2}'' \times 12''$ (698 $\times$ 317 $\times$ 305 mm.)

One each Socket Wrenches and parts:—

$\frac{1}{4}''$ Square Drive Hexagon Sockets. B.A. sizes: 0, 1, 2, 3, 4, 5, 6, 7, 8. Whitworth size: $\frac{1}{8}''$.
American sizes: $\frac{3}{16}''$, $\frac{7}{32}''$, $\frac{1}{4}''$, $\frac{1}{4}''$, $\frac{1}{4}''$, $\frac{1}{4}''$, $\frac{1}{4}''$, $\frac{1}{4}''$, $\frac{1}{4}''$, $\frac{1}{4}''$ Across Flats.

$\frac{1}{4}''$ Square Drive Accessories:— Spinner Handle, Offset Handle, Ratchet Handle, Swivel Handle, Universal Joint, Flexible Extension, 4" and 8" Extensions.

$\frac{1}{2}''$ Square Drive Bihexagon Sockets. Whitworth sizes: $\frac{1}{8}''$, $\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, $\frac{11}{16}''$, $\frac{3}{4}''$.
American sizes: $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, $\frac{11}{16}''$, $\frac{3}{4}''$, $\frac{25}{32}''$, $\frac{13}{16}''$, $\frac{7}{8}''$, $\frac{15}{16}''$, 1", $1\frac{1}{16}''$, $1\frac{1}{8}''$, $1\frac{1}{4}''$, $1\frac{1}{2}''$ Across Flats.
Deep for 14 mm. Sparking Plugs (EDH812).

$\frac{1}{2}''$ Square Drive Bihexagon Crowfoot Socket Ring Wrenches, Whitworth sizes: $\frac{3}{16}''$, $\frac{1}{4}''$, $\frac{5}{16}''$, $\frac{3}{8}''$, $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$.
American sizes: $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, $\frac{11}{16}''$, $\frac{3}{4}''$, $\frac{13}{16}''$, $\frac{7}{8}''$, $\frac{15}{16}''$, 1", $1\frac{1}{16}''$ Across Flats.

$\frac{1}{2}''$ Square Drive Accessories:— Turnscrew Socket Bit, Short "T" Adaptor, Speed Brace, Bar Handle, Offset Handle, Ratchet Handle, Swivel Handle, Universal Joint, 3", 6", 12" and 18" Extensions, Ratchet Unit, 6" Extension and Drive Adaptor, Stud Extractor, Pozidriv Bit Adaptor No. 4 point.

$\frac{1}{2}''$ Square Drive Socket $\times$ $\frac{3}{4}''$ Square Drive Plug Convertor.

$\frac{3}{4}''$ Square Drive Bihexagon Sockets. Whitworth sizes: $\frac{3}{4}''$, $\frac{13}{16}''$, $\frac{7}{8}''$, $\frac{15}{16}''$, 1", $1\frac{1}{16}''$, $1\frac{1}{4}''$.
American sizes: $\frac{13}{16}''$, 1", $1\frac{1}{16}''$, $1\frac{1}{8}''$, $1\frac{1}{4}''$, $1\frac{1}{2}''$, $1\frac{3}{4}''$, $1\frac{7}{8}''$, $1\frac{15}{16}''$, $1\frac{1}{2}''$, 2" Across Flats.

$\frac{3}{4}''$ Square Drive Accessories:— Short "T" Adaptor and Bar, Ratchet Handle with Coupler, 8" Extension.

Midjet Hexagon Ring Wrenches, Whitworth and B.A. sizes: 6 $\times$ 5, 4 $\times$ 3, 4 $\times$ 2, 2 $\times$ 1 B.A., $\frac{1}{8}''$ Whitworth $\times$ 0 B.A.
American sizes: $\frac{3}{16}'' \times \frac{7}{32}''$, $\frac{13}{64}'' \times \frac{15}{64}''$, $\frac{1}{4}'' \times \frac{3}{32}''$, $\frac{5}{16}'' \times \frac{11}{32}''$ Across Flats.

Bihexagon Ring Wrenches, Whitworth sizes: $\frac{1}{8}'' \times \frac{3}{16}''$, $\frac{1}{4}'' \times \frac{5}{16}''$, $\frac{5}{16}'' \times \frac{3}{8}''$, $\frac{3}{16}'' \times \frac{1}{2}''$, $\frac{9}{16}'' \times \frac{11}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{11}{16}'' \times 1''$.
American sizes: $\frac{3}{8}'' \times \frac{3}{16}''$, $\frac{1}{2}'' \times \frac{9}{16}''$, $\frac{5}{8}'' \times \frac{11}{16}''$, $\frac{3}{4}'' \times \frac{7}{8}''$, $\frac{25}{32}'' \times \frac{13}{16}''$, $\frac{15}{16}'' \times 1''$, $1\frac{1}{16}'' \times 1\frac{1}{8}''$, $1\frac{1}{4}'' \times 1\frac{1}{16}''$ Across Flats.

Midjet Open Jaw Double Ended Wrenches, B.A. sizes: 11 $\times$ 9, 10 $\times$ 8, 7 $\times$ 5, 6 $\times$ 4, 3 $\times$ 1, 2 $\times$ 0.
American sizes: $\frac{3}{16}'' \times \frac{7}{32}''$, $\frac{13}{64}'' \times \frac{15}{64}''$, $\frac{1}{4}'' \times \frac{3}{32}''$, $\frac{5}{16}'' \times \frac{11}{32}''$, $\frac{3}{16}'' \times \frac{1}{2}''$ Across Flats.

Open Jaw Double Ended Engineers' Wrenches, Whitworth sizes: $\frac{1}{8}'' \times \frac{3}{16}''$, $\frac{1}{4}'' \times \frac{5}{16}''$, $\frac{3}{8}'' \times \frac{7}{16}''$, $\frac{1}{2}'' \times \frac{9}{16}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{7}{8}'' \times 1''$.
American sizes: $\frac{3}{8}'' \times \frac{1}{2}''$, $\frac{1}{2}'' \times \frac{3}{4}''$, $\frac{5}{8}'' \times \frac{3}{4}''$, $\frac{3}{4}'' \times \frac{7}{8}''$, $\frac{25}{32}'' \times \frac{13}{16}''$, $\frac{15}{16}'' \times 1''$, $1\frac{1}{16}'' \times 1\frac{1}{4}''$, $1\frac{1}{4}'' \times 1\frac{1}{16}''$ Across Flats.

Torque Wrench, 34–166 pound-feet. EVT2000

Miscellaneous tools:— 1 each.

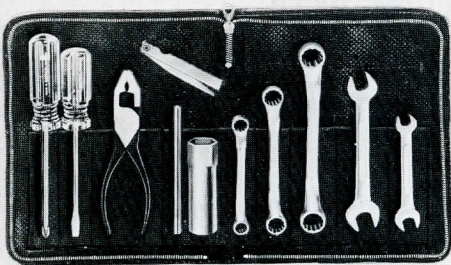
Centre Punch, Nail Punches 12" $\times$ $\frac{3}{4}''$, 8" $\times$ $\frac{3}{8}''$, 6" $\times$ $\frac{3}{16}''$, 14" Stillson pattern Wrench, Chisel Knife, Hack Saw Frame, 11" Heavy Tinsnips, 18 blade Feeler Gauge, 12" Flat File, 10" Round File, 8" Square File, File Handles (3), 8" Snipe Nose Pliers, 6" Sidecutting Nippers, 8" Combination Pliers, 9 $\frac{1}{2}''$ Slip Joint Universal Pliers, Engineer's Screwdrivers 12", 6", and 4" blade, Chubby, Electrician's Screwdriver 2" blade, Phillips Screwdrivers 3" $\times$ No. 1 point, 4" $\times$ No. 2 point, 6" $\times$ No. 3 point. Flat Chisels 1" $\times$ 9", $\frac{3}{4}'' \times 7''$, $\frac{7}{16}'' \times 5''$, 16" Pry Bars (2), Plastic Head Mallet, Ball Pein Hammers, 2 lb. and $\frac{3}{4}$ lb., Allen Keys $\frac{1}{16}''$, $\frac{3}{64}''$, $\frac{1}{8}''$, $\frac{3}{32}''$, $\frac{1}{4}''$, $\frac{5}{32}''$, $\frac{3}{16}''$, $\frac{7}{32}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{5}{8}''$, Double-ended swivel type Brake Adjuster $\frac{1}{4}'' \times \frac{3}{16}''$ Across Flats Square (No. 216).

Weight 200 lb. per set.
90720 g.

No. 569 Chassis for above with four heavy rubber-tyred ball-bearing castors.
This item is an optional extra and is not supplied unless specifically ordered.

Weight 12 lb. each.
5443 g.





OWNER DRIVER TOOLKITS

These toolkits are intended to provide the owner driver with a selected set of quality tools which will enable him to effect small emergency repairs en route and carry out the periodic minor adjustments which are so essential to peak engine performance.

Contained in a black, waterproof, zip case with individual pockets for each tool.

SET No. 900 Unified sizes. Zip case size $9\frac{1}{2}'' \times 8''$ closed (241 $\times$ 203 mm.).

3—Bi-hexagon MINI-RING wrenches: $\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$, $\frac{5}{8}'' \times \frac{1}{16}''$ Across Flats.

2—Engineers' Open Jaw wrenches: $\frac{3}{8}'' \times \frac{1}{16}''$, $\frac{1}{2}'' \times \frac{1}{16}''$ Across Flats.

1—Engineers' Screwdriver 4" Blade.

1—Phillips Screwdriver 4" $\times$ No. 2 Point.

1—Pair Combination Pliers 6".

1—14 mm. Spark Plug wrench with Bar.

1—4" Feeler Gauge Set. 10 Blades, $\frac{1}{2}$ to 25/1000ths of an inch. (No. 8104)

SET No. 901 Metric sizes. Zip case size $9\frac{1}{2}'' \times 8''$ closed (241 $\times$ 203 mm.).

3—Bi-hexagon MINI-RING wrenches: 10 $\times$ 11, 14 $\times$ 15, 16 $\times$ 17 mm.

2—Engineers' Open Jaw wrenches: 8 $\times$ 9, 12 $\times$ 13 mm.

1—Engineers' Screwdriver 4" Blade.

1—Phillips Screwdriver 4" $\times$ No. 2 Point.

1—Pair Combination Pliers 6".

1—14 mm. Spark Plug wrench with Bar.

1—4" Feeler Gauge Set. 10 Blades, $\frac{1}{2}$ to 25/1000ths of an inch. (No. 8104)

Weight **2 lb. 4 oz.** per set.
1020 g.

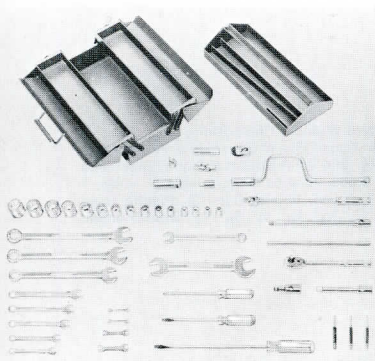
$\frac{1}{2}$

MASSEY-FERGUSON TRACTOR SERVICE SET

OFFICIALLY APPROVED BY MASSEY-FERGUSON LTD., COVENTRY

Contained in a cantilever type toolbox with full-width lower compartment, two half-width hinged compartments, and removable tote-tray. The carrying handles incorporate a locking device and will fold flat if required.

Overall size: $18\frac{3}{4}'' \times 8\frac{3}{8}'' \times 9\frac{1}{4}''$, handles folded flat (476 $\times$ 213 $\times$ 235 mm.).



SET No. FTB1/3

1 each—Turnscrew Socket Bit, Speed Brace, Bar Handle, Ratchet Handle, Swivel Handle, Universal Joint, 3", 6", 12" Extensions, Short "T" Adaptor, Stud Extractor.

16 Bi-hexagon Sockets as follows:—

American sizes: $\frac{7}{16}''$, $\frac{1}{2}''$, $\frac{9}{16}''$, $\frac{11}{16}''$, $\frac{13}{16}''$, $\frac{15}{16}''$, $\frac{3}{4}''$, $\frac{13}{16}''$, $\frac{7}{8}''$, $\frac{15}{16}''$, 1", $1\frac{1}{16}''$, $1\frac{1}{8}''$, $1\frac{1}{4}''$, $1\frac{3}{8}''$, $1\frac{1}{2}''$ Across Flats.

Deep Socket: $\frac{1}{4}''$ Across Flats.

1 Spark Plug Wrench 14 mm.

8 Combination Wrenches American sizes: $\frac{3}{8}''$, $\frac{1}{2}''$, $\frac{5}{8}''$, $\frac{3}{4}''$, $\frac{13}{16}''$, $1\frac{1}{8}''$, $1\frac{1}{4}''$ Across Flats.

1 Slim Pattern Open Jaw Wrench American size: $1\frac{1}{16}'' \times \frac{1}{4}''$ Across Flats.

4 Midget Open Jaw Wrenches B.A. sizes: 2 $\times$ 0, 3 $\times$ 1, 6 $\times$ 4, 7 $\times$ 5.

3 Screwdrivers: 6" $\times$ No. 3 Point Phillips, 12" and 6" Engineers Round Blade.

3 Pin Punches: $\frac{1}{8}''$, $\frac{3}{16}''$, $\frac{1}{4}''$.

1 Cylinder Head Nut Wrench. TE20 and TEA20. Clears rocker shaft. (No. FTB 3)

Weight **34 lb.** per set.
15422 g.

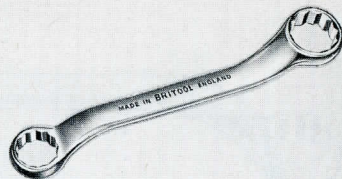
BIHEXAGON RING WRENCHES

MINI-RINGS

DOUBLE-ENDED DOUBLE-OFFSET

THE 6RB AND 6RBM SERIES

These wrenches have shorter overall lengths and are ideal for use in confined spaces.



BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE	D Maximum Outside Diameter of Ring				L Nominal Overall Length		Boxed Quantity	Weight Boxed			
			Small End		Large End		in.	mm.		lb.	oz.	g.	
			Whit.	B.S.	in.	mm.							in.
6RB3344	.338 × .445	1/8 × 3/16	—	1/4	.531	13.49	.670	17.02	4 1/4	108	5	5	142
6RB4452	.445 × .525	3/16 × 1/4	1/4	5/16	.670	17.02	.775	19.68	4 1/4	108	5	7	198
6RB5260	.525 × .600	5/16 × 3/8	5/16	3/4	.775	19.68	.875	22.22	5 1/4	133	5	11	312
6RB6071	.600 × .710	3/4 × 7/8	3/4	7/8	.875	22.22	1.022	25.96	6 3/4	171	5	1 4	568
6RB7182	.710 × .820	7/8 × 1 1/2	7/8	1 1/2	1.022	25.96	1.166	29.62	6 3/4	171	5	1 8	681

UNIFIED AND AMERICAN SIZES

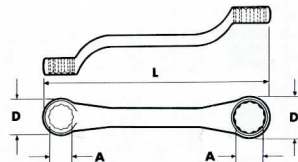
No.	A Nominal Size Across Flats In.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		S.A.E.	UNIFIED Nut Size and Series	Small End		Large End		in.	mm.		lb. oz.	g.
				in.	mm.	in.	mm.					
6RB3743	$\frac{3}{4} \times \frac{7}{16}$	$\frac{3}{16} \times \frac{1}{4}$	10MP $\times \frac{1}{4}$ N	-578	14.68	-660	16.76	$4\frac{1}{4}$	108	10	11	312
6RB4350	$\frac{7}{16} \times \frac{1}{2}$	$\frac{1}{4} \times \frac{3}{8}$	$\frac{1}{4}$ N $\times \frac{3}{8}$ N	-660	16.76	-743	18.87	$4\frac{1}{4}$	108	10	14	397
6RB5056	$\frac{1}{2} \times \frac{9}{16}$	$\frac{5}{16} \times \frac{3}{8}$	$\frac{5}{16}$ N $\times \frac{3}{8}$ N	-743	18.87	-826	20.98	$5\frac{1}{4}$	133	10	1 4	568
6RB5662	$\frac{9}{16} \times \frac{5}{8}$	$\frac{3}{8} \times \frac{7}{16}$	$\frac{3}{8}$ N $\times$ —	-826	20.98	-910	23.11	$5\frac{1}{4}$	133	10	1 9	709
6RB6268	$\frac{5}{8} \times \frac{11}{16}$	$\frac{7}{16} \times \frac{1}{2}$	— $\times \frac{7}{16}$ N	-910	23.11	-991	25.17	$6\frac{3}{4}$	171	10	2 8	1134
6RB6275	$\frac{5}{8} \times \frac{3}{4}$	$\frac{7}{16} \times \frac{1}{2}$	— $\times \frac{1}{2}$ N	-910	23.11	1 074	27.28	$6\frac{3}{4}$	171	10	2 12	1247
6RB6875	$1\frac{1}{16} \times \frac{3}{4}$	— $\times \frac{1}{2}$	$\frac{7}{16}$ N $\times \frac{1}{2}$ N	-991	25.17	1 074	27.28	$6\frac{3}{4}$	171	10	2 12	1247

METRIC SIZES

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter of Ring				L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		Small End		Large End		in.	mm.		lb. oz.	g
		in.	mm	in.	mm.					
6RBM78	7 × 8	447	11,35	500	12,70	4 1/4	108	5	4	113
6RBM89	8 × 9	500	12,70	552	14,02	4 1/4	108	5	4	113
6RBM810	8 × 10	500	12,70	608	15,44	4 1/4	108	5	4	113
6RBM1011	10 × 11	608	15,44	655	16,64	4 1/4	108	5	5	142
6RBM1113	11 × 13	655	16,64	760	19,30	4 1/4	108	5	6	170
6RBM1213	12 × 13	707	17,96	760	19,30	4 1/4	108	5	6	170
6RBM1317	13 × 17	760	19,30	968	24,59	6 3/4	171	5	1	596
6RBM1415	14 × 15	810	20,57	860	21,84	5 1/4	133	5	12	340
6RBM1617	16 × 17	910	23,11	968	24,59	6 3/4	171	5	1	596
6RBM1719	17 × 19	968	24,59	1 070	27,18	6 3/4	171	5	1	624
6RBM1819	18 × 19	1 020	25,91	1 070	27,18	6 3/4	171	5	1	652

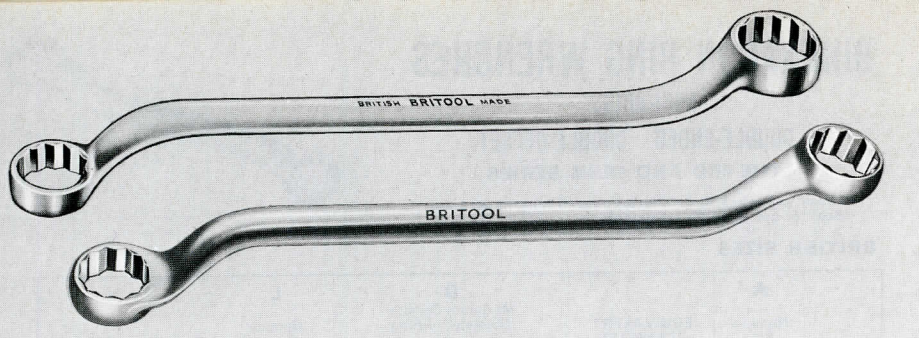


Set No. in Blister Pack	Sizes	Pieces per Set	Weight per Set	
			oz.	g.
2500	1/8 × 3/16, 1/4 × 5/16, 3/8 × 7/16 Whitworth	3	8	227
2502	7/16 × 1/2, 9/16 × 5/8, 1 1/16 × 3/4 Across Flats	3	8	227
2504	8 × 10, 11 × 13, 17 × 19 mm.	3	8	227
2505	12 × 13, 14 × 15, 16 × 17 mm.	3	8	227
Set No. in Wallet	Sizes	Pieces per Set	Weight per Set	
			oz.	g.
2501R	1/8 × 3/16, 3/16 × 1/4, 1/4 × 5/16, 5/16 × 3/8, 3/8 × 1/2 Whitworth	5	13	368
2503R	3/8 × 7/16, 7/16 × 1/2, 1/2 × 5/8, 5/8 × 3/4, 1 1/16 × 3/4 Across Flats	6	1 0	454
2506R	8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.	6	1 0	454



Made from Chrome Alloy Steel.
Bright nickel and chrome plated
finish to B.S. 1224: 1970, service
condition No. 1.





BIHEXAGON RING WRENCHES

DOUBLE-ENDED DOUBLE-OFFSET



BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Boxed Quantity	Weight Boxed	
				Small End		Large End		in.	mm.		lb. oz.	g.
		Whit.	B.S.	in.	mm.	in.	mm.					
Elliptical shanks												
2RB3344	.338 × .445	$\frac{1}{8} \times \frac{3}{16}$	$— \times \frac{1}{4}$	.546	13,87	.697	17,70	6	152	5	9	255
2RB4452	.445 × .525	$\frac{3}{16} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{5}{16}$	.697	17,70	.810	20,57	7	178	5	1 0	454
2RB5260	.525 × .600	$\frac{1}{4} \times \frac{5}{16}$	$\frac{5}{16} \times \frac{3}{8}$	.810	20,57	.916	23,27	8	203	5	1 8	681
2RB6071	.600 × .710	$\frac{5}{16} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{7}{16}$	.916	23,27	1.071	27,20	9	229	5	2 0	907
2RB7182	.710 × .820	$\frac{3}{8} \times \frac{7}{16}$	$\frac{7}{16} \times \frac{1}{2}$	1.071	27,20	1.226	31,14	10	254	5	2 8	1134
2RB8292	.820 × .920	$\frac{7}{16} \times \frac{1}{2}$	$\frac{1}{2} \times \frac{5}{8}$	1.226	31,14	1.368	34,75	11	279	5	3 11	1673
2RB92101	.920 × 1.010	$\frac{1}{2} \times \frac{5}{8}$	$\frac{5}{8} \times \frac{11}{16}$	1.368	34,75	1.494	37,95	12 $\frac{1}{2}$	317	5	5 4	2381
2RB92110	.920 × 1.100	$\frac{5}{8} \times \frac{11}{16}$	$\frac{11}{16} \times \frac{1}{2}$	1.368	34,75	1.621	41,17	12 $\frac{1}{2}$	317	5	5 4	2381
2RB101110	1.010 × 1.100	$\frac{11}{16} \times \frac{1}{2}$	$\frac{1}{2} \times \frac{5}{8}$	1.494	37,95	1.621	41,17	14	356	5	7 0	3173
Round shanks												
4229	1.010 × 1.200	$\frac{7}{16} \times \frac{11}{16}$	$\frac{5}{8} \times \frac{3}{4}$	1.562	39,69	1.812	46,04	14	356	—	1 8	681
4232	1.100 × 1.300	$\frac{5}{8} \times \frac{3}{4}$	$\frac{11}{16} \times \frac{7}{8}$	1.687	42,86	1.937	49,21	15	381	—	1 11	766
4235	1.100 × 1.200	$\frac{5}{8} \times \frac{11}{16}$	$\frac{11}{16} \times \frac{5}{8}$	1.687	42,86	1.812	46,04	15	381	—	1 11	766
4236	1.200 × 1.300	$\frac{11}{16} \times \frac{3}{4}$	$\frac{3}{4} \times \frac{7}{8}$	1.812	46,04	1.937	49,21	15	381	—	2 0	907
4238	1.200 × 1.390	$\frac{11}{16} \times \frac{13}{16}$	$\frac{3}{4} \times \frac{15}{16}$	1.812	46,04	2.062	52,39	15	381	—	2 0	907
4240	1.300 × 1.480	$\frac{3}{4} \times \frac{7}{8}$	$\frac{15}{16} \times 1$	1.937	49,21	2.187	55,56	16	406	—	2 2	964
4246	1.390 × 1.480	$\frac{15}{16} \times 1$	$1 \times 1\frac{1}{16}$	2.062	52,39	2.187	55,56	16	406	—	2 2	964
4250	1.480 × 1.670	$\frac{7}{8} \times 1$	$1 \times 1\frac{1}{8}$	2.187	55,56	2.500	63,50	19	483	—	4 0	1814
4260	1.670 × 1.860	$1 \times 1\frac{1}{8}$	$1\frac{1}{8} \times 1\frac{1}{4}$	2.500	63,50	2.875	73,02	21	533	—	4 12	2154

SETS

Set No. in Box	Sizes	Pieces per Set	Weight per Set	
			lb. oz.	g.
2451B	$\frac{1}{8} \times \frac{3}{16}$, $\frac{1}{4} \times \frac{5}{16}$, $\frac{3}{8} \times \frac{7}{16}$, $\frac{1}{2} \times \frac{9}{16}$ Whit.	4	2 2	964
2453B	$\frac{5}{16} \times \frac{3}{8}$, $\frac{7}{16} \times \frac{1}{4}$, $\frac{1}{2} \times \frac{5}{8}$, $\frac{3}{4} \times \frac{7}{8}$, $\frac{1}{2} \times \frac{9}{16}$, $\frac{5}{8} \times \frac{11}{16}$, $\frac{3}{4} \times \frac{1}{2}$ Whit.	9	8 4	3742
2456B	$\frac{5}{16} \times \frac{3}{8}$, $\frac{7}{16} \times \frac{1}{4}$, $\frac{1}{2} \times \frac{5}{8}$, $\frac{3}{4} \times \frac{7}{8}$, $\frac{1}{2} \times \frac{9}{16}$, $\frac{5}{8} \times \frac{11}{16}$, $\frac{3}{4} \times \frac{1}{2}$ Whit.	7	4 13	2182
2418B	$\frac{7}{16} \times \frac{1}{2}$, $\frac{9}{16} \times \frac{5}{8}$, $\frac{11}{16} \times \frac{3}{4}$, $\frac{13}{16} \times \frac{7}{8}$, $\frac{15}{16} \times 1$, $1 \frac{1}{16} \times 1 \frac{1}{8}$, $1 \frac{1}{4} \times 1 \frac{1}{16}$, $1 \frac{1}{2} \times 1 \frac{1}{2}$, A/F.	8	9 0	4082
2422B	$\frac{1}{4} \times \frac{3}{8}$, $\frac{3}{8} \times \frac{1}{2}$, $\frac{1}{2} \times \frac{9}{16}$, $\frac{5}{8} \times \frac{11}{16}$, $\frac{3}{4} \times \frac{7}{8}$, $\frac{15}{16} \times 1$ Across Flats	6	2 8	1133
2452B	$\frac{3}{16} \times \frac{5}{8}$, $\frac{7}{16} \times \frac{1}{2}$, $\frac{9}{16} \times \frac{5}{8}$, $\frac{11}{16} \times \frac{3}{4}$, $\frac{13}{16} \times \frac{7}{8}$, $\frac{15}{16} \times 1$ Across Flats	11	4 15	2240
2458B	$\frac{7}{16} \times \frac{1}{2}$, $\frac{9}{16} \times \frac{5}{8}$, $\frac{11}{16} \times \frac{3}{4}$, $\frac{13}{16} \times \frac{7}{8}$, $\frac{15}{16} \times 1$ Across Flats	7	3 4	1474
2459B	$\frac{7}{16} \times \frac{1}{2}$, $\frac{9}{16} \times \frac{5}{8}$, $\frac{11}{16} \times \frac{3}{4}$, $\frac{13}{16} \times \frac{7}{8}$, $\frac{15}{16} \times 1$ Across Flats	6	3 10	1644
2421B	7 × 8, 10 × 11, 13 × 17, 19 × 22, 24 × 27 mm.	5	2 4	1020
2454B	6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19, 20 × 22, 21 × 23, 24 × 26 mm.	10	4 4	1927
2455B	6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.	7	1 13	822

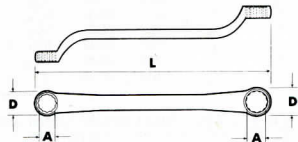
BIHEXAGON RING WRENCHES

UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each		
		S.A.E.	UNIFIED Nut Size and Series	Small End		Large End		in.	mm.		lb. oz.	g.	
				in.	mm.	in.	mm.						
Elliptical Shanks													
2RB2531	1/4 × 5/16	—	4Mp & 6MP × 6MP & 8MP	.423	10.74	.511	12.98	43/4	121	10	9	255	
2RB3137	5/16 × 3/8	— × 3/16	6MP 8MP × 10Mp	.511	12.98	.599	15.21	6	152	10	15	425	
2RB3743	3/8 × 7/16	3/16 × 1/4	10Mp × 1/4N	.599	15.21	.687	17.45	6	152	10	1 2	511	
2RB4350	7/16 × 1/2	1/4 × 3/8	1/4N × 5/8N	.687	17.45	.775	19.68	7	178	10	2 0	907	
2RB5056	1/2 × 9/16	5/16 × 3/8	5/16N × 3/4N	.775	19.68	.863	21.92	7	178	10	2 0	907	
2RB5662	9/16 × 5/8	3/8 × 1/2	3/8N × —	.863	21.92	.951	24.15	8	203	10	3 2	1418	
2RB5668	5/8 × 11/16	7/16 × —	7/16N × 1/2N	.863	21.92	1.039	26.39	9	229	5	2 0	907	
2RB5968	11/16 × 1 1/16	— × 1/2	— × 1/2N	.905	22.99	1.039	26.39	9	229	5	2 3	992	
2RB6268	5/8 × 3/4	7/16 × 1/2	— × 1/2N	.951	24.15	1.039	26.39	9	229	10	4 3	1899	
2RB6275	11/16 × 3/4	— × 1/2	7/16N × 1/2N	1.039	26.39	1.129	28.68	10	254	10	4 14	2211	
2RB6875	1 1/16 × 13/16	— × 3/4	3/4N × —	1.039	26.39	1.216	30.89	10	254	5	2 9	1162	
2RB6881	1 1/16 × 13/16	1/2 × 5/8	1/2N × 1/2H & 5/8N	1.129	28.68	1.305	33.25	10	254	5	2 11	1219	
2RB7587	3/4 × 7/8	— × 7/8	— × 7/8H & 7/8N	1.170	29.72	1.216	30.89	10	254	5	2 11	1219	
2RB7881	7/8 × 1 1/8	— × 7/8	— × 7/8H & 7/8N	1.216	30.89	1.305	33.25	11	279	5	3 11	1673	
2RB8187	1 1/8 × 1 1/4	— × 7/8	— × 7/8N	1.216	30.89	1.392	35.36	11	279	5	3 11	1673	
2RB8193	7/8 × 1 1/8	5/8 × 3/4	5/8H & 5/8N × 5/8N	1.305	33.25	1.392	35.36	12 1/2	317	5	4 12	2154	
2RB8793	1 1/8 × 1 1/4	5/8 × 3/4	5/8N × —	1.392	35.36	1.480	37.59	12 1/2	317	5	5 5	2410	
2RB93100	1 5/8 × 1	1 1/8 × 1 1/4	1 1/8H × 1 1/8H	2.468	62.71	2.875	73.02	21	533	—	4 14	2211	
Round Shanks													
4226	15/16 × 1 1/8	5/8 × —	5/8N × 3/4N	1.375	34.92	1.687	42.86	12 1/2	317	—	1 2	511	
4227	1 1/8 × 1 1/4	1 1/8 × 3/4	— × 5/8H	1.562	39.69	1.687	42.86	14	356	—	1 8	681	
4230	1 1/8 × 1 1/4	3/4 × 1 1/8	5/8H × 3/4N	1.562	39.69	1.687	42.86	14	356	—	1 7	652	
4231	1 1/8 × 1 1/4	3/4 × 7/8	5/8H × 3/4H	1.687	42.86	1.937	49.21	15	381	—	1 7	652	
4233	1 1/8 × 1 1/4	— × 7/8	3/4N × 3/4H	1.812	46.04	1.937	49.21	15	381	—	1 11	766	
4234	7/8 × 1 1/8	5/8 × 3/4	1/2H & 5/8N × 5/8H	1.375	34.92	1.687	42.86	12 1/2	317	—	1 2	511	
4237	1 1/4 × 1 1/2	7/8 × 1	3/4H × 7/8H	1.937	49.21	2.187	55.56	16	406	—	2 0	907	
4241	1 3/4 × 1 1/2	1 1/8 × 1 1/4	1 1/8N × 1N	1.937	49.21	2.187	55.56	16	406	—	2 0	907	
4245	1 5/8 × 1 1/2	1 1/8 × 1 1/4	1 1/8H × 1 1/8H	2.468	62.71	2.875	73.02	21	533	—	4 14	2211	

METRIC SIZES

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter of Ring				L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		Small End		Large End		in.	mm.		lb. oz.	g.
		in.	mm.	in.	mm.					
Elliptical Shanks										
9RBM67	6×7	.403	10.24	.459	11.66	4½	114	10	9	255
9RBM78	7×8	.459	11.66	.514	13.06	4¾	121	5	6	170
9RBM89	8×9	.514	13.06	.569	14.45	6	152	10	1 1	482
9RBM810	8×10	.514	13.06	.625	15.87	6	152	5	9	255
9RBM1011	10×11	.625	15.87	.680	17.27	6	152	10	1 2	511
9RBM1113	11×13	.680	17.27	.792	20.12	7	178	5	1 0	454
9RBM1213	12×13	.736	18.69	.792	20.12	7	178	10	2 0	907
9RBM1317	13×17	.792	20.12	1.013	25.73	9	229	5	1 11	766
9RBM1415	14×15	.848	21.54	.904	22.96	8	203	10	3 2	1418
9RBM1617	16×17	.958	24.33	1.013	25.73	9	229	10	4 3	1899
9RBM1719	17×19	1.013	25.73	1.124	28.55	10	254	5	2 4	1020
9RBM1819	18×19	1.070	27.18	1.124	28.55	10	254	10	4 13	2182
9RBM1922	19×22	1.124	28.55	1.294	32.87	10	254	5	2 10	1190
9RBM2022	20×22	1.181	30.00	1.294	32.87	11	279	5	3 13	1729
9RBM2123	21×23	1.238	31.44	1.349	34.26	11	279	5	3 13	1729
9RBM2224	22×24	1.294	32.87	1.401	35.58	12½	317	5	5 4	2381
9RBM2426	24×26	1.401	35.58	1.514	38.45	12½	317	5	5 6	2438
9RBM2427	24×27	1.401	35.58	1.569	39.85	14	356	5	6 8	2949
Round Shanks										
2RBM2528	25×28	1.562	39.69	1.687	42.86	14	356	—	1 8	681
2RBM2730	27×30	1.687	42.86	1.812	46.04	14	356	—	1 8	681
2RBM2732	27×32	1.562	39.69	1.812	46.04	14	356	—	1 8	681
2RBM3032	30×32	1.812	46.04	1.937	49.21	15	381	—	1 10	737
2RBM3236	32×36	1.937	49.21	2.187	55.56	16	406	—	2 2	964
2RBM3641	36×41	2.250	57.15	2.500	63.50	19	483	—	4 4	1927
2RBM4146	41×46	2.468	62.70	2.875	73.02	21	533	—	4 14	2211

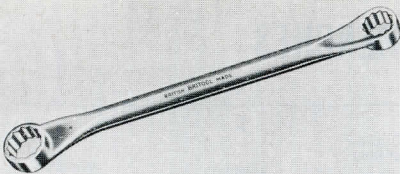


Made from Chrome Alloy Steel.

Bright nickel and chrome plated finish to

B.S. 1224: 1970, service condition No. 1.





BIHEXAGON RING WRENCHES

DOUBLE-ENDED DOUBLE-OFFSET

THE 4500 SERIES

This pattern wrench has a different size at each end and heads set at an angle of 15°.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

BRITISH SIZES

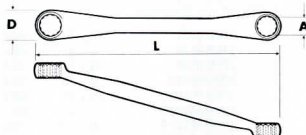
No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Weight Each	
				Small End		Large End		in. mm.			
				Whit.	B.S.	in.	mm.	in.	mm.	in.	mm.
4501	.338 × .445	$\frac{1}{8} \times \frac{3}{16}$	$— \times \frac{1}{4}$	.531	13.49	.687	17.46	6	152	$2\frac{1}{2}$	71
4507	.525 × .600	$\frac{1}{4} \times \frac{3}{8}$	$\frac{5}{16} \times \frac{3}{8}$	.812	20.64	.968	24.61	7	178	$4\frac{1}{2}$	127
4510	.600 × .710	$\frac{3}{8} \times \frac{1}{2}$	$\frac{3}{8} \times \frac{7}{16}$	.968	24.61	1.093	27.78	$8\frac{1}{2}$	216	8	227
4515	.710 × .820	$\frac{1}{2} \times \frac{7}{16}$	$\frac{1}{2} \times \frac{1}{2}$	1.093	27.78	1.250	31.75	10	254	10	283
4520	.820 × .920	$\frac{7}{16} \times \frac{1}{2}$	$\frac{1}{2} \times \frac{9}{16}$	1.312	33.34	1.375	34.92	11	279	$13\frac{1}{2}$	383
4528	1.010 × 1.100	$\frac{9}{16} \times \frac{5}{8}$	$\frac{5}{8} \times \frac{11}{16}$	1.562	39.69	1.687	42.86	14	356	$1\frac{1}{8}$	681
4536	1.200 × 1.300	$\frac{11}{16} \times \frac{3}{4}$	$\frac{3}{4} \times \frac{7}{8}$	1.812	46.04	1.937	49.21	15	381	1 10	737

UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Weight Each	
		S.A.E.	UNIFIED	Small End		Large End		in.	mm.	lb. oz.	g.
			Nut Size and Series	in.	mm.	in.	mm.				
4500	3/16 × 3/8	—	6Mp 8Mp × 10Mp	.500	12,70	.609	15,48	6	152	2½	71
4502	3/8 × 1/2	3/16 × 1/4	10Mp × 1/4N	.609*	15,48	.687	17,46	6	152	2½	71
4503	1/2 × 5/8	1/4 × 3/8	1/4N × 3/8N	.687	17,46	.750	19,05	6	152	4	113
4505	5/8 × 3/4	5/16 × 3/8	3/8N × 3/8N	.812	20,64	.875	22,22	7	178	5	142
4513	3/4 × 7/8	1/2 × 5/8	1/2N × 5/8N	.968	24,61	1.093	27,78	8½	216	8	227
4517	7/8 × 1 1/8	1/2 × 3/4	1/2N × 3/4N & 3/4N	1.187	30,16	1.375	34,92	10	254	12½	354
4525	1 1/16 × 1 1/8	5/8 × 3/4	5/8N × —	1.375	34,92	1.562	39,69	12½	317	1 0	454
4530	1 1/8 × 1 1/4	3/4 × —	3/4N × 3/4N	1.687	42,86	1.812	46,04	14	356	1 9	709

SETS

Set No. in Box	Sizes	Pieces per Set	Weight per Set	
			lb. oz.	g.
2407B	1/8 × 3/16, 1/4 × 5/16, 5/16 × 3/8, 3/8 × 1/2, 1/2 × 5/8, 5/8 × 3/4 Whit.	7	5 13	2634
2406B	3/8 × 1/2, 1/2 × 5/8, 5/8 × 3/4, 3/4 × 7/8, 7/8 × 1 1/8 Across Flats	6	4 13	2182



SINGLE-ENDED SINGLE-OFFSET

THE 4000 SERIES

Single-ended short shank ring wrenches with specially thin walls.

BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring		L Nominal Overall Length		Weight Each	
				in.	mm.	in.	mm.	oz.	g.
		Whit.	B.S.	in.	mm.	in.	mm.	oz.	g.
4004	.445	3/16	1/4	.687	17.46	3 7/8	98	1 1/2	42
4007	.525	1/4	3/8	.812	20.64	5 1/16	138	3	85
4011	.600	5/16	3/8	.906	23.02	5 1/2	140	4 1/2	127
4015	.710	3/8	1/2	1.062	26.99	6 1/2	165	6	170
4020	.820	1/2	5/8	1.218	30.96	6 7/8	167	8	227
4024	.920	1/2	3/4	1.343	34.13	8	203	11 1/2	326

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

BIHEXAGON RING WRENCHES

FLARE NUT

THE 4300 SERIES

These wrenches are designed with a gap in each head for dealing with union nuts and electrical units where wiring or pipes preclude the use of a standard pattern ring wrench. Heads are set at an angle of 15°. Each end is a different size.

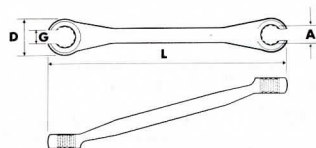


BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE	D Maximum Outside Diameter of Ring				L Nominal Overall Length		G Gap Size		Weight Each			
			Small End		Large End		in.	mm.	in.	mm.	lb. oz.	g.		
			Whit.	B.S.	in.	mm.								
4301	.338 × .445	1/8 × 3/16	—	× 1/4	.687	17,46	.812	20,64	6	152	3/16 × 1/4	4,8 × 6,3	2 1/2	71
4307	.525 × .600	1/4 × 5/16	5/16 × 3/8	—	.968	24,61	1.093	27,78	8	203	3/16 × 7/16	7,9 × 11,1	5	142
4315	.710 × .820	3/8 × 7/8	7/8 × 1 1/2	—	1.312	33,34	1.375	34,92	10	254	1/2 × 9/16	12,7 × 14,3	9	255
4320	.820 × .920	1/2 × 5/8	5/8 × 1 1/4	—	1.375	34,92	1.562	39,69	11	279	9/16 × 11/16	14,3 × 17,5	13	368
4324	.920 × 1.100	5/8 × 1 1/8	1 1/8 × 1 5/8	—	1.562	39,69	1.937	49,21	11 1/2	292	1 1/16 × 1 3/16	17,5 × 20,6	1 0	454
4328	1.010 × 1.100	3/4 × 1 1/8	1 1/8 × 1 5/8	—	1.812	46,04	1.937	49,21	12	305	3/4 × 1 1/8	19,0 × 20,6	1 6	624
4329	1.010 × 1.200	3/4 × 1 1/8	1 1/8 × 1 5/8	—	1.812	46,04	2.062	52,39	13	330	3/4 × 7/8	19,0 × 22,2	1 6	624
4334	1.100 × 1.200	3/4 × 1 1/8	1 1/8 × 1 5/8	—	1.937	49,21	2.062	52,39	14 1/2	368	13/16 × 1 5/16	20,6 × 23,8	1 6	624
4336	1.200 × 1.300	1 1/16 × 3/4	3/4 × 7/8	—	2.062	52,39	2.187	55,56	15	381	15/16 × 1	23,8 × 25,4	1 9	709

UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	UNIFIED Nut Size and Series	D Maximum Outside Diameter of Ring				L Nominal Overall Length		G Gap Size		Weight Each	
			Small End		Large End		in. mm.		in. mm.		lb. oz. g.	
			in.	mm.	in.	mm.						
4302	$\frac{3}{8} \times \frac{7}{16}$	10MP $\times \frac{1}{4}$ N	.750	19,05	.812	20,64	$\frac{6}{16}$	165	$\frac{3}{16} \times \frac{1}{4}$	4,8 $\times$ 6,3	2	57
4305	$\frac{1}{2} \times \frac{5}{8}$	$\frac{5}{16}$ N $\times \frac{3}{8}$ N	.968	24,61	1.093	27,78	8	203	$\frac{3}{16} \times \frac{3}{8}$	7,9 $\times$ 9,5	$\frac{4}{2}$	127
4313	$\frac{5}{8} \times \frac{1 1}{8}$	$\times \frac{7}{16}$ N	1.187	30,16	1.250	31,75	9	229	$\frac{7}{16} \times \frac{1}{2}$	11,1 $\times$ 12,7	$\frac{7}{2}$	213
4317	$\frac{3}{4} \times \frac{7}{8}$	$\frac{1}{2}$ N $\times \frac{1}{2}$ H & $\frac{3}{16}$ N	1.375	34,92	1.562	39,69	11	279	$\frac{9}{16} \times \frac{5}{8}$	14,3 $\times$ 15,9	9	255
4325	$\frac{15}{16} \times 1$	$\frac{5}{8}$ N $\times$ $\times \frac{3}{4}$ N	1.687	42,86	1.812	46,04	$\frac{11}{2}$	292	$\frac{1 1}{16} \times \frac{3}{4}$	17,5 $\times$ 19,0	1 0	454
4326	$1 \times 1 \frac{1}{8}$	$\times \frac{3}{4}$ N	1.812	46,04	1.937	49,21	12	305	$\frac{3}{4} \times \frac{3}{4}$	19,0 $\times$ 19,0	1 2	511



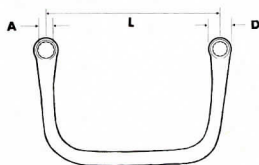
HALF MOON

THE 4700 SERIES

Each end has a different size. These wrenches are particularly useful on starter motor and dynamo mountings, also inlet and exhaust manifolds.

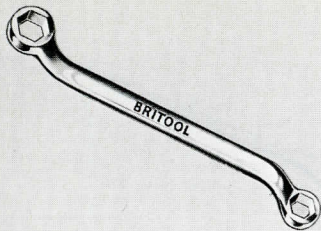
BRITISH, UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Length between BiHexagon Centres		Weight Each	
		Whit.	UNIFIED	Small End		Large End		in.	mm.	oz.	g
			Nut Size and Series	in.	mm.	in.	mm.				
4707	.525 × .600	1/4 × 5/16	—	.687	17,46	.968	24,61	6	152	6 1/2	184
4715	.710 × .820	3/8 × 7/8	—	1.093	27,78	1.250	31,75	8	203	12	340
4703	7/16 × 1/2	—	1/4N × 5/16N	.750	19,05	.812	20,64	6	152	6 1/2	184
4709	3/8 × 5/8	—	3/8N × 1/2	.875	22,22	.968	24,61	7	178	10	283
4712	3/8 × 3/4	—	— × 1/2N	.946	24,03	1.100	27,94	8	203	12	340



All items on this page are made from Chrome Alloy Steel and finished in bright nickel and chrome plate to B.S. 1224: 1970, service condition No. 1.





HEXAGON RING WRENCHES

MIDGET

DOUBLE-ENDED DOUBLE-OFFSET

THE RH AND RHM SERIES

These miniature wrenches will be found invaluable for service on electrical, radio and similar assemblies.

Sets supplied in red plastic wallet.

BRITISH SIZES



No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Weight per 10	
				Small End		Large End		in.	mm.	oz.	g.
		Whit.	B.A.	in.	mm.	in.	mm.	in.	mm.		
RH1922	.193 × .220	—	6 × 5	.328	8,33	.360	9,14	2 3/4	70	3 1/2	99
RH2428	.248 × .282	—	4 × 3	.392	9,96	.462	11,73	3 1/8	79	4 1/2	127
RH2432	.248 × .324	—	4 × 2	.392	9,96	.520	13,21	3 1/8	79	5	142
RH2326	.324 × .365	—	2 × 1	.520	13,21	.557	14,15	3 1/2	89	8 1/2	241
RH3341	.338 × .413	1/8	0	.518	13,16	.612	15,54	3 1/2	89	8 1/2	241

UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	UNIFIED		D Maximum Outside Diameter of Ring				L Nominal Overall Length		Weight per 10	
				Small End		Large End					
		Bolt dia. and Series	Nut size and Series	in.	mm.	in.	mm.	in.	mm.	oz.	g.
RH1821	$\frac{3}{16} \times \frac{7}{32}$	4M —	4Mp —	.324	8,23	.361	9,17	$\frac{23}{4}$	70	3	85
RH2023	$\frac{1}{8} \times \frac{1}{4}$	—	—	.342	8,69	.378	9,60	$\frac{23}{4}$	70	3	85
RH2528	$\frac{1}{4} \times \frac{5}{16}$	6 & 8M ×	4Mp & 6MP ×	.396	10,06	.462	11,73	$\frac{3}{8}$	79	5½	156
RH2531	$\frac{1}{4} \times \frac{3}{16}$	6 & 8M ×	4Mp & 6MP ×	.396	10,06	.498	12,65	$\frac{3}{8}$	79	5	142
RH3134	10M	6Mp & 8MP	6Mp & 8MP								
	$\frac{5}{16} \times \frac{1}{32}$	10M ×	6Mp & 8MP × 8Mp & 10MP	.498	12,65	.535	13,59	3½	89	8	227

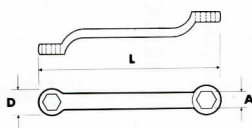
THE RHM SERIES—METRIC SIZES

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter of Ring				L Nominal Overall Length		Weight per 10	
		Small End		Large End		in.	mm.	oz.	g.
		in.	mm.	in.	mm.				
RHM45	4 × 5	.288	7,31	.336	8,53	23/4	70	3	85
RHM555	5 × 5,5	.336	8,53	.365	9,27	23/4	70	3	85
RHM56	5 × 6	.336	8,53	.378	9,60	23/4	70	3	85
RHM78	7 × 8	.462	11,73	.503	12,78	3 1/8	79	5	142
RHM910	9 × 10	.548	13,92	.594	15,09	3 1/2	89	8 1/2	241

Made from Chrome Alloy Steel.
Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

SETS

Set No. in Wallet	Sizes	Pieces per Set	Weight per set	
			oz.	g.
2410	6 × 5, 4 × 3, 2 × 1 B.A., 1/8 Whit. × 0 B.A.	5	3	85
2412	3/16 × 7/32, 1/4 × 5/16, 1/4 × 3/16, 5/16 × 1/2 Across Flats	4	2	57
2411	4 × 5 - 5 × 5, 5 - 7 × 8 - 9 × 10 mm.	4	3	85



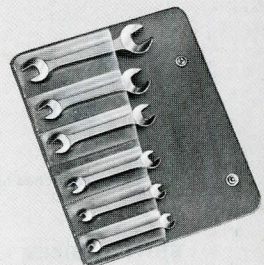
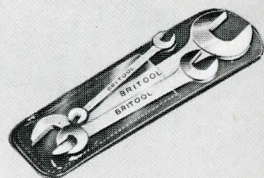
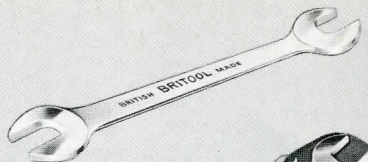
OPEN JAW WRENCHES

DOUBLE-ENDED MIDGET

THE 5J AND 5JM SERIES

These wrenches conform to British Standard BS. 1842:1952. 15° jaws.

Sets are supplied in red plastic wallets as illustrated.



BRITISH SIZES

No.	A Nominal Size Across Flats in.	B.A. Sizes	T Maximum Thickness of Jaws		L Nominal Overall Length		Weight per 10	
			in.	mm.	in.	mm.	oz.	g.
5J1013	.103 × .131	11 × 9	.115	2.92	2 1/32	58	3/4	21
5J1115	.117 × .152	10 × 8	.115	2.92	2 1/32	58	1	28
5J1722	.172 × .220	7 × 5	.115	2.92	2 1/2	63	1 1/2	42
5J1924	.193 × .248	6 × 4	.115	2.92	2 1/2	63	2 1/2	71
5J2432	.248 × .324	4 × 2	.145	3.68	3	76	3 3/4	106
5J2836	.282 × .365	3 × 1	.125	3.17	3	76	4	113
5J3241	.324 × .413	2 × 0	.145	3.68	3 1/2	89	6 1/2	184

UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Weight per 10	
		UNIFIED							
		Bolt dia. and Series	Nut Size and Series	in.	mm.	in.	mm.	oz.	g.
5J1821	$\frac{3}{16} \times \frac{7}{32}$	4M × —	4MP × —	.115	2.92	$2\frac{1}{2}$	63	$2\frac{1}{2}$	71
5J1825	$\frac{3}{16} \times \frac{1}{4}$	4M × 6 & 8M	4MP × 4Mp & 6MP	.115	2.92	$2\frac{1}{2}$	63	$2\frac{1}{2}$	71
5J2528	$\frac{1}{4} \times \frac{3}{16}$	6 & 8M × —	4Mp & 6MP × —	.125	3.17	$2\frac{13}{16}$	71	$3\frac{1}{2}$	99
5J2531	$\frac{1}{4} \times \frac{3}{16}$	6 & 8M × 10M	4Mp & 6MP × 6Mp & 8MP	.125	3.17	$2\frac{13}{16}$	71	$3\frac{1}{2}$	99
5J3134	$\frac{3}{16} \times \frac{1}{2}$	10M × —	6Mp & 8MP × 8Mp & 10MP	.125	3.17	3	76	4	113
5J3743	$\frac{3}{8} \times \frac{7}{16}$	— × $\frac{1}{4}$ N	10Mp × $\frac{1}{4}$ N	.145	3.68	$3\frac{5}{8}$	92	$6\frac{1}{2}$	184



METRIC SIZES

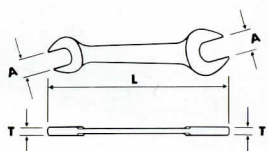
No.	A Nominal Size Across Flats mm.	T Maximum Thickness of Jaws		L Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	oz.	g.
5JM324	3.2 × 4	.115	2.92	2 1/32	58	3/4	21
5JM45	4 × 5	.115	2.92	2 1/2	63	1 1/2	42
5JM555	5 × 5.5	.115	2.92	2 1/2	63	2 1/2	71
5JM78	7 × 8	.115	2.92	3	76	4	113

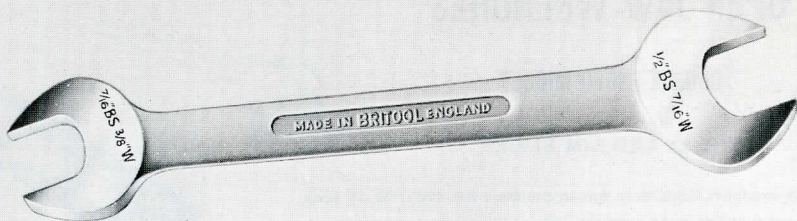
Made from Chrome Alloy Steel.

Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

SETS

Set No. in Wallet	Sizes	Pieces per set	Weight per Set	
			oz.	g.
2486	11 × 9, 10 × 8, 7 × 5, 6 × 4, 3 × 1, 2 × 0 B.A.	6	3	85
2487	10 × 8, 6 × 4, 2 × 0 B.A.	3	1	28
2489	3/16 × 7/32, 1/4 × 3/16, 3/16 × 1/2, 3/8 × 7/16 A/F	4	3	85
2490	3.2 × 4 - 5 × 5.5 - 7 × 8 mm.	3	3	85





OPEN JAW WRENCHES

SLIM PATTERN

DOUBLE-ENDED

THE 2J AND 2JM SERIES

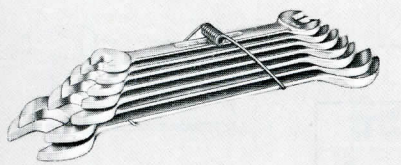
These wrenches have a different size at each end. The jaws are milled at 15° to the shank.

BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		Whit.	B.S.	in.	mm.	in.	mm.		lb. oz.	g.
2J3344	.338 × .445	1/16 × 3/16	— × 1/4	.192	4.88	6 3/16	157	5	9	255
2J4452	.445 × .525	3/16 × 1/4	1/4 × 5/16	.192	4.88	6 3/4	171	5	12	340
2J5260	.525 × .600	1/4 × 5/16	5/16 × 3/8	.223	5.66	7 1/4	184	5	1 1	482
2J6071	.600 × .710	5/16 × 3/8	3/8 × 7/16	.255	6.48	7 7/8	200	5	1 7	652
2J7182	.710 × .820	3/8 × 7/16	7/16 × 1/2	.255	6.48	8 3/8	213	5	1 13	822
2J7192	.710 × .920	3/8 × 1/2	7/16 × 9/16	.286	7.26	9 5/8	244	5	2 11	1219
2J8292	.820 × .920	7/16 × 1/2	1/2 × 9/16	.286	7.26	9 5/8	244	5	2 11	1219
2J92101	.920 × 1.010	1/2 × 9/16	9/16 × 5/8	.317	8.05	10 1/8	259	5	3 7	1559
2J101110	1.010 × 1.100	9/16 × 5/8	5/8 × 11/16	.317	8.05	11 1/8	283	5	4 5	1956
2J110120	1.100 × 1.200	5/8 × 11/16	11/16 × 3/4	.348	8.84	12 1/8	317	5	5 13	2636
2J110130	1.100 × 1.300	5/8 × 3/4	1/16 × 7/8	.358	9.09	12 1/2	317	5	6 0	2722

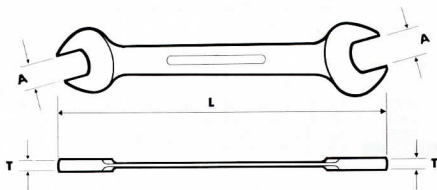
SETS

Set No. In Box	Sizes	Pieces per Set	Clipped	Weight per Set	
				lb. oz.	g.
2440B	1/8 × 7/16", 3/16 × 1/4", 1/4 × 5/16", 5/16 × 3/8", 3/8 × 7/16", 7/16 × 1/2", 1/2 × 9/16", 9/16 × 5/8", 5/8 × 3/4", Whit.	9	No	4 7	2012
2441B	1/8 × 7/16", 1/4 × 5/16", 3/8 × 7/16", 1/2 × 9/16", Whit.	4	Yes	1 10	737
2446B	1/8 × 7/16", 3/16 × 1/4", 1/4 × 5/16", 5/16 × 3/8", 3/8 × 7/16", 7/16 × 1/2", 1/2 × 9/16", Whit.	7	Yes	2 6	1077



A Britool Wrench Set with its patented clip. Pressure is maintained even when one or two wrenches are taken out.

Made from Chrome Alloy Steel.
Bright nickel and chrome plated finish to
B.S. 1224 : 1970, service condition No. 1.



THE 2J SERIES—UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		S.A.E.	UNIFIED Nut Size and Series	in.	mm.	in.	mm.		lb. oz.	g.
2J2531	$\frac{1}{4} \times \frac{5}{16}$	—	4Mp & 6Mp × 6Mp 6Mp & 8Mp × 10Mp	.161	4.09	$\frac{43}{64}$	121	10	10	283
2J3137	$\frac{5}{16} \times \frac{3}{8}$	—	—	.161	4.09	$\frac{5}{16}$	140	10	12	340
2J3743	$\frac{3}{8} \times \frac{7}{16}$	$\frac{3}{16} \times \frac{1}{4}$	10Mp × $\frac{1}{4}$ N	.192	4.88	$\frac{63}{64}$	157	10	1 3	539
2J4350	$\frac{7}{16} \times \frac{1}{2}$	$\frac{7}{16} \times \frac{3}{8}$	$\frac{1}{4}$ N × $\frac{5}{16}$ N	.192	4.88	$\frac{63}{64}$	171	10	1 10	737
2J5056	$\frac{1}{2} \times \frac{9}{16}$	$\frac{5}{16} \times \frac{3}{8}$	$\frac{5}{16}$ N × $\frac{3}{8}$ N	.223	5.66	$\frac{71}{64}$	184	10	2 4	1020
2J5662	$\frac{9}{16} \times \frac{5}{8}$	$\frac{3}{8} \times \frac{7}{16}$	$\frac{3}{8}$ N × $\frac{7}{16}$ Mp	.223	5.66	$\frac{71}{64}$	184	10	2 0	907
2J5968	$\frac{11}{32} \times \frac{11}{16}$	—	— × $\frac{7}{16}$ N	.255	6.48	$\frac{77}{64}$	200	5	1 9	709
2J6268	$\frac{5}{8} \times \frac{11}{16}$	$\frac{7}{16} \times \frac{1}{2}$	— × $\frac{7}{16}$ N	.255	6.48	$\frac{77}{64}$	200	10	3 2	1418
2J6275	$\frac{5}{8} \times \frac{3}{4}$	$\frac{7}{16} \times \frac{1}{2}$	$\frac{3}{8}$ Mp × $\frac{1}{2}$ N	.255	6.48	$\frac{87}{64}$	213	10	3 10	1644
2J6875	$\frac{11}{16} \times \frac{3}{4}$	— × $\frac{1}{2}$	$\frac{7}{16}$ N × $\frac{1}{2}$ N	.255	6.48	$\frac{87}{64}$	213	10	3 6	1531
2J7587	$\frac{3}{4} \times \frac{7}{8}$	$\frac{1}{2} \times \frac{7}{16}$	$\frac{1}{2}$ N × $\frac{1}{2}$ H & $\frac{7}{16}$ N	.286	7.26	$\frac{95}{64}$	244	5	2 9	1162
2J7881	$\frac{7}{8} \times \frac{15}{16}$	—	— × $\frac{5}{8}$ N	.286	7.26	$\frac{95}{64}$	244	5	2 11	1219
2J8193	$\frac{15}{16} \times \frac{15}{16}$	— × $\frac{5}{8}$	— × $\frac{5}{8}$ N	.286	7.26	$\frac{95}{64}$	244	5	2 11	1219
2J8796	$\frac{7}{8} \times \frac{15}{16}$	$\frac{15}{16} \times \frac{1}{2}$	$\frac{1}{2}$ H & $\frac{9}{16}$ N × —	.317	8.05	$\frac{103}{64}$	259	—	10	283
2J93100	$\frac{15}{16} \times 1$	$\frac{3}{4} \times \frac{11}{16}$	$\frac{5}{8}$ N × $\frac{3}{4}$ H	.317	8.05	$\frac{103}{64}$	259	5	3 7	1559
2J106125	$\frac{15}{16} \times \frac{15}{16}$	$\frac{3}{4} \times \frac{7}{8}$	$\frac{5}{8}$ N × $\frac{3}{4}$ H	.358	9.09	$\frac{121}{64}$	317	5	6 6	2892
2J112131	$\frac{15}{16} \times 1 \frac{1}{16}$	—	$\frac{3}{4}$ N × $\frac{7}{8}$ N	.348	8.84	$\frac{121}{64}$	317	5	6 0	2722

SETS

Set No. In Box	Sizes	Pieces per Set	Clipped	Weight per Set	
				lb. oz.	g.
2425B	$\frac{1}{4} \times \frac{5}{16}$, $\frac{3}{8} \times \frac{7}{16}$, $\frac{1}{2} \times \frac{9}{16}$, $\frac{5}{8} \times \frac{11}{16}$, $\frac{3}{4} \times \frac{7}{8}$, $\frac{15}{16} \times 1$, Across Flats	6	Yes	1 15	879
2426B	$\frac{3}{8} \times \frac{7}{16}$, $\frac{1}{2} \times \frac{9}{16}$, $\frac{5}{8} \times \frac{11}{16}$, $\frac{3}{4} \times \frac{7}{8}$, $\frac{15}{16} \times 1$, Across Flats	7	Yes	1 7	652
2442B	$\frac{3}{8} \times \frac{7}{16}$, $\frac{1}{2} \times \frac{9}{16}$, $\frac{5}{8} \times \frac{11}{16}$, $\frac{3}{4} \times \frac{7}{8}$, $\frac{15}{16} \times 1$, Across Flats	10	No	4 4	1927
2447B	$\frac{15}{16} \times 1$, $\frac{1}{2} \times \frac{9}{16}$, Across Flats	7	No	3 8	1588

THE 2JM SERIES—METRIC SIZES

No.	A Nominal Size Across Flats mm.	T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		in.	mm.	in.	mm.		lb. oz.	g.
2JM67	6 × 7	.161	4.09	43/64	121	10	9	255
2JM78	7 × 8	.161	4.09	5 1/16	138	5	6	170
2JM89	8 × 9	.161	4.09	5 1/2	140	10	11	312
2JM810	8 × 10	.161	4.09	5 1/2	140	5	6	170
2JM1011	10 × 11	.192	4.88	6 3/4	157	10	1 2	511
2JM1113	11 × 13	.192	4.88	6 3/4	171	5	13	368
2JM1213	12 × 13	.192	4.88	6 3/4	171	10	1 8	681
2JM1317	13 × 17	.255	6.48	7 1/4	200	5	1 11	766
2JM1415	14 × 15	.223	5.66	7 1/4	184	10	2 4	1020
2JM1617	16 × 17	.255	6.48	7 1/4	200	10	2 14	1304
2JM1719	17 × 19	.255	6.48	8 7/8	213	5	2 0	907
2JM1819	18 × 19	.255	6.48	8 7/8	213	10	3 10	1644
2JM1922	19 × 22	.286	7.26	9 5/8	244	5	2 10	1190
2JM2022	20 × 22	.286	7.26	9 5/8	244	5	2 10	1190
2JM2123	21 × 23	.286	7.26	9 5/8	244	5	2 9	1162
2JM2224	22 × 24	.317	8.05	10 3/16	259	5	3 11	1673
2JM2426	24 × 26	.317	8.05	10 3/16	259	5	3 11	1673
2JM2427	24 × 27	.317	8.05	11 1/4	286	5	4 4	1927
2JM2528	25 × 28	.317	8.05	11 1/8	282	5	4 4	1927
2JM2730	27 × 30	.358	9.09	12 5/8	314	5	5 14	2665
2JM2732	27 × 32	.358	9.09	12 1/2	317	5	6 0	2722
2JM3032	30 × 32	.358	9.09	12 5/8	321	5	6 3	2807

SETS

Set No. In Box	Sizes	Pieces per Set	Clipped	Weight per Set	
				lb. oz.	g.
2427B	6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19, 20 × 22, 21 × 23, 24 × 26, 25 × 28, 27 × 32 mm.	12	No	5 0	2268
2428B	6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.	7	Yes	1 6	624
2429B	7 × 8, 10 × 11, 13 × 17, 19 × 22, 24 × 27, 30 × 32 mm.	6	No	3 0	1361



Spearhead
CHROME

OPEN JAW WRENCHES

ENGINEERS PATTERN DOUBLE-ENDED

THE 6J AND 6JM SERIES

These wrenches conform to British Standard BS. 192:1954. 15° jaw angle.
Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to
B.S. 1224: 1970, service condition No. 1. (except where stated).

BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		Whit.	B.S.	in.	mm.	in.	mm.		lb. oz.	g.
6J3344	.338 × .445	1/8 × 3/16	— × 1/4	.180	4.57	4 1/2	114	5	5	142
6J4452	.445 × .525	3/16 × 1/4	1/4 × 3/16	.213	5.41	5 1/4	133	5	8	227
6J5260	.525 × .600	1/4 × 5/16	5/16 × 3/8	.243	6.17	6	152	5	14	397
6J6071	.600 × .710	5/16 × 3/8	3/4 × 7/16	.268	7.31	6 3/4	171	5	1 6	624
6J7182	.710 × .820	3/8 × 1/2	7/16 × 1/2	.332	8.43	8	203	5	2 5	1049
6J7192	.710 × .920	3/8 × 1/2	7/16 × 9/16	.332	8.43	8 1/2	216	5	2 14	1304
6J8292	.820 × .920	7/16 × 1/2	1/2 × 9/16	.373	9.47	9	229	5	3 8	1588
6J82101	.820 × 1.010	7/16 × 9/16	1/2 × 5/8	.409	10.39	9 1/2	241	5	3 14	1758
6J92101	.920 × 1.010	1/2 × 9/16	7/16 × 5/8	.409	10.39	9 1/2	241	5	3 14	1758
6J92110	.920 × 1.100	1/2 × 5/8	7/16 × 11/16	.446	11.33	10 3/4	273	5	5 13	2636
6J101110	1.010 × 1.100	5/8 × 5/8	5/8 × 11/16	.446	11.33	10 3/4	273	5	5 9	2523
6J101120	1.010 × 1.200	5/8 × 11/16	5/8 × 3/4	.486	12.34	12	305	5	7 10	3458
6J110120	1.100 × 1.200	5/8 × 11/16	11/16 × 3/4	.486	12.34	12	305	5	7 12	3515
6J110130	1.100 × 1.300	5/8 × 3/4	11/16 × 3/4	.526	13.36	13	330	5	8 12	3969
6J120130	1.200 × 1.300	11/16 × 3/4	3/4 × 7/8	.526	13.36	13 1/2	343	—	2 2	964
6J120139	1.200 × 1.390	11/16 × 13/16	3/4 × 15/16	.562	14.27	13 1/2	343	—	2 4	1020
6J130148	1.300 × 1.480	7/8 × 1	7/8 × 1	.599	15.21	14 1/2	368	—	2 8	1134
6J148167	1.480 × 1.670	7/8 × 1	1 × 1 1/8	.676	17.17	16 1/4	413	—	3 12	1701
6J157167	1.574 × 1.670	15/16 × 1	— × 1 1/8	.676	17.17	16 1/4	413	—	3 12	1701
*6J167186	1.670 × 1.860	1 × 1 1/8	1 1/4 × 1 1/4	.753	19.13	18	457	—	4 14	2211
*6J186205	1.860 × 2.050	1 1/8 × 1 1/4	1 1/4 × 1 3/8	.830	21.08	19 1/2	495	—	7 9	3430
*6J222241	2.220 × 2.410	1 3/8 × 1 1/2	1 1/2 × 1 5/8	.975	24.76	24	610	—	12 6	5614

* Black rustproof finish.

SETS

Set No. in Box	Sizes	Pieces per Set	Clipped	Series	Weight per Set	
					lb. oz.	g.
2460B	1/8 × 3/16, 1/4 × 3/16, 3/8 × 3/16, 1/2 × 3/16 Whit.	4	Yes	6J	1 11	766
2461B	1/8 × 3/16, 3/16 × 1/4, 1/4 × 3/8, 5/16 × 3/8, 3/8 × 7/16, 7/16 × 1/2, 1/2 × 7/16 Whit.	7	Yes	6J	2 12	1247
2468B	1/8 × 3/16, 3/16 × 1/4, 1/4 × 5/16, 5/16 × 3/8, 3/8 × 7/16 Whit.	5	Yes	6J	1 3	539
2462B	7/16 × 1/2, 9/16 × 5/8, 11/16 × 3/4, 1 1/16 × 7/8 A/F	4	Yes	6J	1 4	567
2463B	7/16 × 1/2, 1/2 × 9/16, 9/16 × 5/8, 5/8 × 11/16, 11/16 × 13/16, 3/4 × 7/8, 7/8 × 15/16 Across Flats	7	Yes	6J	2 12	1247
2464B	3/8 × 7/16, 1/2 × 9/16, 9/16 × 11/16, 5/8 × 3/4, 29/32 × 13/16, 13/16 × 1, 7/8 × 1 1/16 Across Flats	7	No	6J	3 6	1531
2469B	3/8 × 7/16, 7/16 × 1/2, 1/2 × 9/16, 9/16 × 5/8, 5/8 × 3/4 Across Flats	5	Yes	6J	1 0	454
2465B	10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.	5	Yes	6JM	1 1	482
2466B	8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19, 20 × 21, 22 × 23, 24 × 25 mm.	9	No	6JM	3 4	1474
2467B	8 × 10, 11 × 13, 17 × 19, 22 × 24 mm.	4	Yes	6JM	1 8	681



THE 6J SERIES—UNIFIED AND AMERICAN SIZES

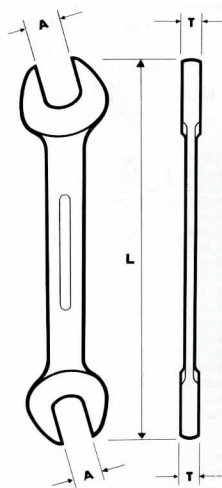
No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		S.A.E.	UNIFIED	in.	mm.	in.	mm.		lb. oz.	g.
			Nut Size and Series							
6J2531	1/4 × 5/16	—	6 MP × BMP	.112	2.84	3/4	82	10	4	113
6J3137	5/16 × 3/8	—	—	.153	3.89	3/4	95	10	6	170
6J3743	3/8 × 7/16	3/16 × 1/4	— 1/4N	.178	4.52	4 1/2	114	10	10	283
6J4350	7/16 × 1/2	1/4 × 3/16	1/4N × 3/16N	.205	5.21	5 1/4	133	10	1 1	482
6J5056	1/2 × 5/8	5/16 × 3/8	5/16N × 3/8N	.230	5.84	6	152	10	1 13	822
6J5662	9/16 × 5/8	3/8 × 7/16	3/8N × —	.255	6.48	6 1/4	159	10	2 3	992
6J5668	5/8 × 11/16	7/16 × 1/2	7/16N × 1/2N	.280	7.11	6 3/4	171	5	1 6	624
6J5968	11/32 × 15/16	—	— × 1/16N	.280	7.11	6 3/4	171	5	1 8	681
6J5978	5/32 × 25/32	7/16 × —	— × 7/16N	.305	7.75	7 3/8	187	5	1 14	851
6J6268	5/8 × 3/4	7/16 × 1/2	— × 1/2N	.305	7.75	7 3/8	187	10	2 14	1304
6J6275	5/8 × 13/16	— × 1/2	7/16N × 1/2N	.305	7.75	7 3/8	187	10	3 12	1701
6J6281	5/8 × 15/16	7/16 × —	7/16N × —	.330	8.38	8	203	5	2 5	1049
6J6875	11/16 × 3/4	— × 1/2	7/16N × 1/2N	.305	7.75	7 3/8	187	10	3 10	1644
6J6878	1 1/16 × 25/32	—	7/16N × —	.305	7.75	7 3/8	187	5	1 12	794
6J6881	3/4 × 13/16	—	7/16N × —	.330	8.38	8	203	5	2 4	1020
6J7581	3/4 × 15/16	1/2 × —	1/2N × —	.330	8.38	8	203	5	2 4	1020
6J7587	3/4 × 7/8	1/2 × 3/16	1/2N × 1/2H & 3/16N	.355	9.02	8 1/2	216	5	2 12	1247
6J7881	25/32 × 13/16	—	—	.330	8.38	8	203	5	2 4	1020
6J8187	13/16 × 7/8	— × 3/16	— × 1/2H & 3/16N	.355	9.02	8 1/2	216	5	2 12	1247
6J8793	7/8 × 15/16	5/16 × 3/8	1/2H & 3/16N × 3/8N	.380	9.65	9 1/2	241	5	3 15	1786
6J87100	7/8 × 1	1/16 × 1/16	1/2H & 3/16N × —	.405	10.29	9 1/2	241	5	3 15	1786
6J87106	7/8 × 1 1/16	3/8 × 1/2	3/8N & 3/16N × 5/8H	.430	10.92	10 3/4	273	5	5 3	2353
6J93100	15/16 × 1	3/8 × 1/2	3/8N × 1/2N	.405	10.29	9 1/2	241	5	4 5	1956
6J93112	15/16 × 1 1/8	5/8 × 3/4	5/8N × 3/4N	.455	11.56	10 3/4	273	5	5 7	2466
6J100106	1 1/8 × 1 1/16	1/16 × 3/4	— × 5/8H	.430	10.92	10 3/4	273	5	5 10	2551
6J106112	1 1/8 × 1 1/8	5/8 × 3/4	5/8H × 3/4N	.455	11.56	12	305	5	8 1	3657
6J106125	1 1/8 × 1 1/4	3/4 × 3/4	5/8H × 3/4H	.505	12.83	12	305	5	7 15	3600
6J112125	1 1/8 × 1 1/4	— × 7/8	3/4N × 3/4H	.505	12.83	13	330	5	9 4	4195
6J112131	1 1/8 × 1 1/2	—	3/4N × 3/4N	.530	13.46	13	330	5	8 14	4026
6J125143	1 1/4 × 1 7/16	7/8 × 1	3/4H × 7/8H	.580	14.73	14 1/2	368	—	2 8	1134
6J131150	1 3/8 × 1 1/2	—	7/8N × 1N	.605	15.37	14 1/2	368	—	2 6	1077
6J137150	1 3/8 × 1 1/2	—	— × 1N	.605	15.37	14 1/2	368	—	2 12	1247
6J143162	1 7/8 × 1 5/8	1 × 1 1/8	7/8H × 1H	.660	16.76	16 1/4	413	—	3 10	1644
*6J162181	1 5/8 × 1 13/16	1 1/8 × 1 1/4	1H × 1 1/8H	.735	18.67	18	457	—	5 3	2353
*6J168187	1 11/16 × 1 7/8	—	—	.735	18.67	18	457	—	4 14	2211
*6J181200	1 11/16 × 2	1 1/4 × 1 3/8	1 1/8H × 1 1/4H	.810	20.57	19 1/2	495	—	7 8	3402
*6J218237	2 3/16 × 2 1/8	1 1/2 × —	1 5/8H × 1 5/8H	.960	24.38	24	610	—	12 6	5614

* Black rustproof finish.

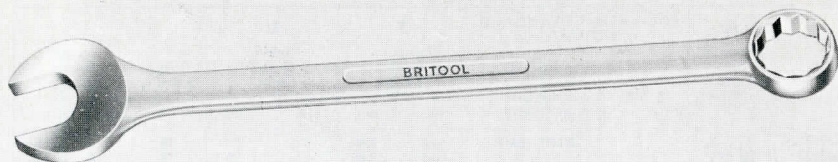
THE 6JM SERIES—METRIC SIZES

No.	A Nominal Size Across Flats mm.	T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		in.	mm.	in.	mm.		lb. oz.	g.
6JM67	6 × 7	.115	2.79	2 1/16	75	5	3	85
6JM78	7 × 8	.129	3.28	3 1/4	83	5	4	113
6JM89	8 × 9	.145	3.68	3 3/4	95	5	5	142
6JM810	8 × 10	.145	3.68	3 1/16	94	5	5	142
6JM1011	10 × 11	.176	4.47	4 1/2	114	5	5	142
6JM1113	11 × 13	.208	5.28	5 1/2	133	5	11	312
6JM1213	12 × 13	.208	5.28	5 1/4	133	5	11	312
6JM1317	13 × 17	.271	6.88	6 3/4	171	5	1 5	596
6JM1415	14 × 15	.239	6.04	6	152	5	14	397
6JM1617	16 × 17	.271	6.88	6 3/4	171	5	1 7	652
6JM1719	17 × 19	.302	7.67	7 3/8	187	5	2 0	907
6JM1819	18 × 19	.302	7.67	7 3/8	187	5	2 0	907
6JM1922	19 × 22	.336	8.53	8 1/2	216	5	2 14	1304
6JM2021	20 × 21	.336	8.53	8 1/2	216	5	2 14	1304
6JM2223	22 × 23	.367	9.32	9	229	5	3 8	1588
6JM2224	22 × 24	.380	9.65	9 1/2	241	5	4 2	1871
6JM2425	24 × 25	.400	10.16	9 1/2	241	5	4 3	1899
6JM2427	24 × 27	.430	10.92	10 3/4	273	5	5 9	2523
6JM2627	26 × 27	.432	10.97	10 3/4	273	5	5 15	2693
6JM2730	27 × 30	.455	11.56	12	305	5	7 8	3402
6JM2829	28 × 29	.463	11.76	12	305	5	7 10	3458
6JM3031	30 × 31	.494	12.55	12	305	5	7 12	3515
6JM3032	30 × 32	.510	12.95	13	330	5	9 12	4422
6JM3235	32 × 35	.558	14.17	13 1/2	343	—	2 2	964
6JM3236	32 × 36	.574	14.58	14 1/2	368	—	2 10	1190
6JM3641	36 × 41	.654	16.61	16 1/4	413	—	4 0	1814
*6JM4146	41 × 46	.735	18.67	18	457	—	5 2	2325
*6JM4650	46 × 50	.796	20.22	19 1/2	495	—	7 10	3458
*6JM5055	50 × 55	.876	22.25	22 1/2	571	—	9 0	4082
*6JM5560	55 × 60	.956	24.28	24	610	—	12 10	5741

**Spearhead
CHROME**



BRITCO



COMBINATION WRENCHES COMBINED RING AND OPEN JAW

These wrenches have a broached ring at one end and an open jaw at the other. Both ends fit the same size nut. 15° jaw angle and ring offset.

THE RJ, RJM AND RJQ SERIES

BRITISH SIZES—BIHEXAGON RING

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter of Ring		T Maximum Thickness of Jaw		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		Whit.	B.S.	B.A.	in.	mm.	in.	mm.	in.	mm.		lb. oz.	g.
RJ248	.248	—	—	4	.406	10,31	.122	3,10	3 ¹ / ₈	79	5	3	85
RJ324	.324	—	—	2	.476	12,09	.154	3,91	4 ¹ / ₁₆	106	5	5	142
RJ338	.338	1 ¹ / ₈	—	—	.514	13,06	.164	4,16	4 ¹ / ₂	114	5	5	142
RJ413	.413	—	—	0	.638	16,20	.200	5,08	5 ¹ / ₁₆	144	5	9	255
RJ445	.445	3 ¹ / ₁₆	1 ¹ / ₄	—	.638	16,20	.200	5,08	5 ¹ / ₁₆	144	5	9	255
RJ525	.525	1 ¹ / ₄	3 ¹ / ₁₆	—	.760	19,30	.235	5,97	6 ¹ / ₁₆	173	5	14	397
RJ600	.600	3 ¹ / ₁₆	3 ⁷ / ₈	—	.883	22,43	.270	6,86	8 ¹ / ₈	206	5	1	624
RJ710	.710	3 ¹ / ₈	7 ¹ / ₈	—	1.048	26,62	.318	8,08	9 ¹ / ₂	241	5	2	3
RJ820	.820	7 ¹ / ₈	1 ¹ / ₂	—	1.211	30,76	.364	9,24	11 ¹ / ₈	283	5	3	992
RJ920	.920	1 ¹ / ₂	5 ¹ / ₈	—	1.377	34,97	.412	10,46	12 ⁵ / ₈	321	5	4	8
RJ1010	1.010	5 ¹ / ₈	5 ¹ / ₈	—	1.500	38,10	.447	11,35	13 ¹ / ₄	349	—	1	1
RJ1100	1.100	3 ¹ / ₄	1 ¹ / ₁₆	—	1.640	41,66	.488	12,39	15 ¹ / ₁₆	383	—	1	7
RJ1200	1.200	1 ¹ / ₁₆	3 ¹ / ₄	—	1.755	44,58	.520	13,21	16 ¹ / ₁₆	410	—	1	12
RJ1300	1.300	1	7 ¹ / ₈	—	1.923	48,84	.568	14,43	17 ¹ / ₁₆	449	—	2	4
RJ1480	1.480	7 ¹ / ₈	1	—	2.178	55,32	.640	16,26	20	508	—	3	3

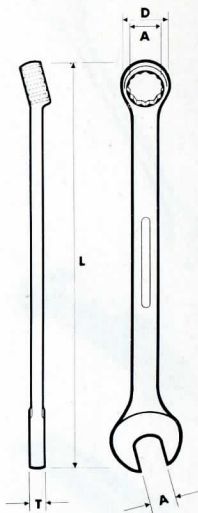
UNIFIED AND AMERICAN SIZES—BIHEXAGON RING

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Ring		T Maximum Thickness of Jaw		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		S.A.E.	UNIFIED	in.	mm.	in.	mm.	in.	mm.		lb. oz.	g.
			Nut Size and Series									
RJ250	1/4	—	4Mp 6MP	.406	10.31	.122	3.10	3 1/8	79	5	3	85
RJ312	5/16	—	6Mp 8MP	.476	12.09	.154	3.91	4 1/16	106	5	5	142
RJ344	11/32	—	8Mp 10MP	.514	13.06	.164	4.16	4 1/2	114	5	5	142
RJ375	3/8	—	10Mp	.574	14.58	.182	4.62	5 1/8	130	5	7	198
RJ437	7/16	1/4	1 1/4 N	.638	16.20	.200	5.08	5 11/16	144	5	9	255
RJ500	1/2	5/16	5/16 N	.760	19.30	.235	5.97	6 1/16	173	5	14	397
RJ562	5/16	3/8	3/8 N	.825	20.95	.254	6.45	7 1/8	192	5	1	2
RJ625	1/2	7/16	—	.930	23.62	.284	7.21	8 1/2	216	5	1	8
RJ687	5/8	—	7/16 N	1.003	25.47	.305	7.75	9 1/8	233	5	1	14
RJ750	3/4	1/2	1 1/2 N	1.105	28.06	.334	8.48	10	254	5	2	7
RJ812	7/16	—	—	1.211	30.76	.364	9.24	11 1/8	283	5	3	2
RJ875	5/8	3/4	1 1/2 N	1.286	32.66	.386	9.80	11 1/16	300	5	3	10
RJ937	1/2	5/8	5/8 N	1.377	34.97	.412	10.46	12 5/8	321	5	4	8
RJ1000	1	1 1/16	—	1.450	36.83	.433	11.00	13 1/8	333	—	1	0
RJ1062	1 1/16	3/4	5/8 N	1.567	39.80	.466	11.84	14 1/4	362	—	1	3
RJ1125	1 1/8	—	3/4 N	1.640	41.66	.488	12.39	15 1/16	383	—	1	8
RJ1250	1 1/4	7/8	3/4 H	1.848	46.94	.547	13.89	17	432	—	2	0
RJ1312	1 1/8	—	7/8 N	1.923	48.84	.568	14.43	17 11/16	449	—	2	2
RJ1375	1 3/8	—	—	2.024	51.41	.598	15.19	18 5/8	473	—	2	10
RJ1437	1 7/16	1	7/8 H	2.101	53.36	.619	15.72	19 1/8	492	—	2	15
RJ1500	1 1/2	—	1H	2.178	55.32	.642	16.31	20	508	—	3	4
RJ1625	1 5/8	1 1/8	1H	2.383	60.53	.700	17.78	21 7/8	556	—	4	2

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

THE RJM SERIES—METRIC SIZES—BIHEXAGON RING

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter of Ring		T Maximum Thickness of Jaw		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
		in.	mm.	in.	mm.	in.	mm.		lb. oz.	g.
RJM6	6	.406	10,31	.122	3,10	3 $\frac{1}{8}$	79	5	3	85
RJM7	7	.414	10,51	.136	3,45	3 $\frac{5}{8}$	92	5	4	113
RJM8	8	.476	12,09	.154	3,91	4 $\frac{1}{8}$	106	5	5	142
RJM9	9	.514	13,06	.164	4,16	4 $\frac{1}{2}$	114	5	6	170
RJM10	10	.574	14,58	.182	4,62	5 $\frac{1}{8}$	130	5	7	198
RJM11	11	.638	16,20	.200	5,08	5 $\frac{1}{2}$	144	5	9	255
RJM12	12	.701	17,80	.218	5,54	6 $\frac{1}{4}$	159	5	12	340
RJM13	13	.760	19,30	.235	5,97	6 $\frac{3}{4}$	173	5	15	425
RJM14	14	.825	20,95	.254	6,45	7 $\frac{1}{8}$	192	5	1	539
RJM15	15	.883	22,43	.270	6,86	8 $\frac{1}{8}$	206	5	1	596
RJM16	16	.930	23,62	.284	7,21	8 $\frac{3}{4}$	216	5	1	709
RJM17	17	1.003	25,47	.305	7,75	9 $\frac{1}{4}$	233	5	1	879
RJM18	18	1.048	26,62	.318	8,08	9 $\frac{1}{2}$	241	5	2	964
RJM19	19	1.105	28,06	.334	8,48	10	254	5	2	1105
RJM20	20	1.162	29,51	.351	8,91	10 $\frac{1}{8}$	268	—	8	227
RJM21	21	1.211	30,76	.364	9,24	11 $\frac{1}{8}$	283	—	9	255
RJM22	22	1.286	32,66	.386	9,80	11 $\frac{1}{2}$	300	—	11	312
RJM23	23	1.336	33,93	.401	10,18	12 $\frac{1}{8}$	308	—	13	368
RJM24	24	1.377	34,97	.412	10,46	12 $\frac{3}{8}$	321	—	14	397
RJM25	25	1.450	36,83	.433	11,00	13 $\frac{1}{8}$	333	—	1	482
RJM26	26	1.500	38,10	.447	11,35	13 $\frac{3}{4}$	349	—	1	511
RJM27	27	1.567	39,80	.466	11,84	14 $\frac{1}{4}$	362	—	1	567
RJM28	28	1.640	41,66	.488	12,39	15 $\frac{1}{8}$	383	—	1	624
RJM30	30	1.755	44,58	.520	13,21	16 $\frac{1}{4}$	413	—	1	766
RJM32	32	1.848	46,94	.547	13,89	17	432	—	1	879
RJM36	36	2.101	53,36	.619	15,72	19 $\frac{3}{8}$	492	—	2	1304
RJM41	41	2.383	60,53	.700	17,78	21 $\frac{1}{8}$	556	—	4	1871



SETS

Set No. in Wallet	Set No. in Box	Sizes	Pieces per Set	Weight per Set			
				In Wallet		In Box	
				lb. oz.	g.	lb. oz.	g.
2630R	—	4 B.A., 2 B.A., 0 B.A., $\frac{1}{8}$ Whit.	4	4	113	—	—
—	2631B	$\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ Whit.	6	—	—	1 10	737
—	2632B	$\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$ Whit.	11	—	—	12 6	5614
2633R	—	$\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ Across Flats	4	4	113	—	—
—	2634B	$\frac{3}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$ Across Flats	6	—	—	1 11	766
—	2635B	$\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{8}$, 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$ A/F	14	—	—	9 14	4478
—	2636B	$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{8}$, 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$ Across Flats	17	—	—	24 0	10888
2637R	—	6, 7, 8, 9 mm. Across Flats	4	3	85	—	—
—	2638B	10, 12, 14, 17, 19, 22 mm. Across Flats	6	—	—	1 15	879
—	2639B	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm.	12	—	—	2 8	1134
—	2640B	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 mm.	19	—	—	6 2	2779
—	2641B	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 32, 36, 41 mm.	23	—	—	22 0	9979
—	2642B	7, 8, 10, 11, 13, 17, 19 mm.	7	—	—	1 2	511
—	2643B	7, 8, 10, 11, 13, 17, 19, 22, 24, 27, 30, 32, 36, 41 mm.	14	—	—	12 8	5670

THE RJQ SERIES—BISQUARE RING

No.	A Nominal Size Across Flats in.	D EQUIVALENT STANDARD NUT SIZE			Maximum Outside Diameter of Ring		Maximum Thickness of Jaw		Nominal Overall Length		Weight Each	
		B.A.	Whit.	U.N.F.	in.	mm.	in.	mm.	in.	mm.	oz.	g.
RJQ250	$\frac{1}{4}$	5, 6	$\frac{1}{8}$	4	.476	12,09	.154	3,91	4 $\frac{3}{16}$	106	1	28
RJQ312	$\frac{5}{16}$	3, 4	$\frac{5}{32}$	6	.574	14,58	.182	4,62	5 $\frac{1}{8}$	130	1	28
RJQ375	$\frac{3}{8}$	2	$\frac{3}{16}$	10	.701	17,80	.218	5,54	6 $\frac{1}{4}$	159	2 $\frac{1}{2}$	71
RJQ437	$\frac{7}{16}$	1	$\frac{7}{32}$	$\frac{1}{4}$	.825	20,95	.254	6,45	7 $\frac{1}{4}$	192	3 $\frac{1}{2}$	99
RJQ500	$\frac{1}{2}$	0	$\frac{1}{2}$	—	.930	23,62	.284	7,21	8 $\frac{1}{2}$	216	5	142

OPEN JAW WRENCHES

DOUBLE ENDED

THE 3J AND 3JM SERIES

These wrenches conform to British Standard B.S. 192:1954.

BRITISH SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		Whit.	B.S.	in.	mm.	in.	mm.		lb. oz.	g.
3J3344	.338 × .445	1/8 × 3/16	— × 1/4	.195	4.95	4 1/2	114	10	10	283
3J4452	.445 × .525	1/4 × 1/2	1/4 × 5/16	.233	5.92	5 1/4	133	10	1 1	482
3J5260	.525 × .600	1/2 × 5/8	5/16 × 3/8	.258	6.55	6	152	10	1 13	822
3J6071	.600 × .710	5/8 × 3/4	3/8 × 1/2	.303	7.70	6 3/4	171	10	2 13	1275
3J7182	.710 × .820	3/4 × 7/8	7/16 × 1/2	.345	8.76	8	203	10	4 10	2097
3J8292	.820 × .920	7/8 × 1 1/2	1/2 × 9/16	.385	9.78	9	229	5	3 8	1588
3J82101	.820 × 1.010	1 1/2 × 9/16	1/2 × 5/8	.405	10.29	9 1/2	241	5	3 14	1758
3J92101	.920 × 1.010	1 1/2 × 9/16	9/16 × 5/8	.415	10.54	9 1/2	241	5	3 15	1786
3J101110	1.010 × 1.100	9/16 × 5/8	5/8 × 1 1/16	.453	11.50	10 3/4	273	5	5 9	2523
3J110130	1.100 × 1.300	5/8 × 3/4	1 1/16 × 7/8	.540	13.72	13	330	5	8 12	3969

UNIFIED AND AMERICAN SIZES

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		S.A.E.	UNIFIED	in.	mm.	in.	mm.		lb. oz.	g.
			Nut size and Series							
*3J3743	$\frac{3}{8} \times \frac{3}{16}$	$\frac{3}{16} \times \frac{1}{4}$	—	.195	4.95	$4\frac{1}{2}$	114	10	10	283
*3J4350	$\frac{1}{16} \times \frac{1}{2}$	$\frac{1}{4} \times \frac{5}{16}$	$\frac{1}{4}N \times \frac{5}{16}N$	.233	5.92	$5\frac{1}{4}$	133	10	1 1	482
*3J5056	$\frac{1}{2} \times \frac{5}{8}$	$\frac{5}{8} \times \frac{3}{8}$	—	.258	6.55	6	152	10	1 13	822
*3J5662	$\frac{5}{8} \times \frac{3}{4}$	$\frac{3}{4} \times \frac{5}{8}$	$\frac{3}{8}N \times \text{—}$	.270	6.86	$6\frac{1}{4}$	159	10	2 3	992
*3J5968	$1\frac{1}{2} \times 1\frac{1}{16}$	—	—	.303	7.70	$6\frac{3}{4}$	171	5	1 8	681
*3J6275	$\frac{3}{4} \times \frac{3}{4}$	$\frac{7}{16} \times \frac{1}{2}$	—	.320	8.13	$7\frac{1}{2}$	190	10	3 12	1701
3J6875	$1\frac{1}{16} \times \frac{3}{4}$	$\frac{1}{2} \times \frac{1}{2}$	$\frac{7}{16}N \times \frac{1}{2}N$	.320	8.13	$7\frac{1}{2}$	190	10	3 10	1644
*3J7587	$\frac{3}{4} \times \frac{7}{8}$	$\frac{1}{2} \times \frac{9}{16}$	—	.370	9.40	$8\frac{1}{2}$	216	5	2 12	1247
*3J7881	$25/32 \times 13/16$	—	—	.345	8.76	8	203	5	2 4	1020
3J8187	$1\frac{1}{16} \times \frac{7}{8}$	$\text{—} \times \frac{9}{16}$	$\text{—} \times \frac{1}{2}H$ $\frac{9}{16}N$	.365	9.27	$8\frac{1}{2}$	216	5	2 12	1247
*3J93100	$1\frac{5}{16} \times 1$	$\frac{5}{8} \times 1\frac{1}{16}$	$\frac{5}{8}N \times \text{—}$	.415	10.54	$9\frac{1}{2}$	241	5	4 5	1956
3J93112	$1\frac{5}{16} \times 1\frac{1}{8}$	$\frac{5}{8} \times \text{—}$	$\frac{5}{8}N \times \frac{3}{4}N$	.457	11.61	$10\frac{3}{4}$	273	5	5 7	2466
*3J106125	$1\frac{1}{8} \times 1\frac{1}{4}$	$\frac{3}{4} \times \frac{7}{8}$	$\frac{5}{8}H \times \frac{3}{4}H$	.510	12.95	12	305	5	7 15	3600

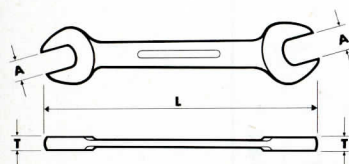
SETS

Set No.	Sizes	Pieces per Set	Series	Clipped	In Four Colour Carton	In Plain Carton	Weight per Set	
							lb. oz.	g.
2470	All in British table except 3J82101	9	3J	NO	NO	YES	5 14	2665
2471	First 6 sizes	6	3J	YES	YES	—	2 0	907
2472	1/4 × 3/16, 1/4 × 7/16, 3/8 × 3/16, 1/2 × 9/16 Whit.	4	3J	YES	YES	—	1 12	794
2473	Items marked * in American table	10	3J	NO	NO	YES	5 9	2523
2474	3/16 × 1/2, 3/16 × 5/8, 1/2 × 5/8, 3/4 × 7/8, 1 1/2 × 1 1/16	5	3J	YES	YES	—	2 4	1020
2478	3/16 × 1/2, 3/16 × 5/8, 1/2 × 3/4, 1 1/2 × 7/8, 1 5/8 × 1 1/8	5	3J	NO	NO	YES	2 12	1247
2479	3/4 × 7/8, 1/2 × 3/4, 1 1/2 × 1 1/8, 3/4 × 7/8 Across Flats	4	3J	YES	YES	—	1 4	567
2475	All in Metric table	11	3JM	NO	NO	YES	6 4	2835
2476	First 7 sizes	7	3JM	YES	YES	—	1 12	794
2477	First 5 sizes	5	3JM	YES	YES	—	14	397

THE 3JM SERIES—METRIC SIZES

No.	A Nominal Size Across Flats mm.	T Maximum Thickness of Jaws		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
		in.	mm.	in.	mm.		lb. oz.	g.
3JM89	8 × 9	.173	4.39	3 3/4	95	10	5	142
3JM1011	10 × 11	.195	4.95	4 1/2	114	10	9	255
3JM1213	12 × 13	.233	5.92	5 1/4	133	10	1 0	454
3JM1415	14 × 15	.258	6.55	6	152	10	1 12	794
3JM1617	16 × 17	.303	7.70	6 3/4	171	10	2 13	1275
3JM1819	18 × 19	.320	8.13	7 1/2	190	10	3 10	1644
3JM2022	20 × 22	.370	9.40	8 1/2	216	5	2 14	1304
3JM2123	21 × 23	.385	9.78	9	229	5	3 8	1588
3JM2426	24 × 26	.415	10.54	9 1/2	241	5	4 3	1899
3JM2528	25 × 28	.453	11.50	10 3/4	273	5	5 15	2693
3JM2732	27 × 32	.510	12.95	12	305	5	7 10	3458

Made from High Grade Carbon Steel.
Black stove enamel finish.

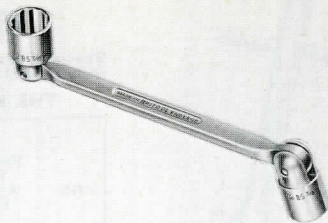


SWIVEL WRENCHES

THE SB AND SBM SERIES

The slim wall sockets are friction held by means of a spring loaded ball and have a full 180° of movement.

A set of these wrenches is virtually a toolkit on its own and will prove an extremely worthwhile addition to the equipment of any Service Station, Garage or Workshop.



BRITISH SIZES—BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter of Socket				L Nominal Overall Length		Weight Each	
				Small End		Large End					
		Whit	B.S.	in.	mm.	in.	mm.	in.	mm.	lb. oz.	g.
SB3344	.338 × .445	1/8 × 3/16	— × 1/4	.519	13,18	.657	16,69	7 5/8	194	3	85
SB5260	.525 × .600	1/4 × 3/16	5/16 × 3/8	.758	19,25	.854	21,69	9	229	6	170
SB7182	.710 × .820	3/8 × 1/16	7/16 × 1/2	.997	25,32	1.137	28,88	10 1/2	267	13	368
SB92101	.920 × 1.010	1/2 × 3/16	7/16 × 5/8	1.267	32,18	1.381	35,08	13 7/8	352	1 10	737

UNIFIED AND AMERICAN SIZES—BIHEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter of Socket				L Nominal Overall Length		Weight Each	
		S.A.E.	UNIFIED		Small End		Large End		in.	mm.	lb. oz.	g.
			Bolt dia. and Series	Nut Size and Series								
					in.	mm.	in.	mm.				
SB3743	$\frac{3}{8} \times \frac{7}{16}$	$\frac{3}{16} \times \frac{1}{4}$	— $\times \frac{1}{4}$ N	— $\times \frac{1}{4}$ N	.566	14,38	.646	16,41	$7\frac{5}{8}$	194	3	85
SB5056	$\frac{1}{2} \times \frac{9}{16}$	$\frac{5}{16} \times \frac{3}{8}$	$\frac{5}{16}$ N $\times \frac{3}{8}$ N	$\frac{5}{16}$ N $\times \frac{3}{8}$ N	.717	18,21	.805	20,45	9	229	6	170
SB6268	$\frac{5}{8} \times \frac{11}{16}$	$\frac{7}{16} \times \frac{3}{8}$	$\frac{7}{16}$ N $\times \frac{3}{8}$ N	— $\times \frac{7}{16}$ N	.889	22,58	.968	24,59	$10\frac{1}{2}$	267	12	340
SB7587	$\frac{3}{4} \times \frac{7}{8}$	$\frac{1}{2} \times \frac{9}{16}$	$\frac{1}{2}$ N $\times \frac{1}{2}$ H	$\frac{1}{2}$ N $\times \frac{1}{2}$ H & $\frac{7}{16}$ N	1.048	26,62	1.207	30,66	$12\frac{1}{2}$	317	1 2	511
SB8193	$1\frac{1}{16} \times \frac{1}{16}$	— $\times \frac{5}{8}$	$\frac{7}{16}$ N $\times \frac{5}{8}$ N	— $\times \frac{5}{8}$ N	1.127	28,62	1.289	32,74	$12\frac{1}{2}$	317	1 3	539

METRIC SIZES—BIHEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter of Socket				L Nominal Overall Length		Weight Each	
		Small End	Large End			in.	mm.	lb. oz.	g.
SBM89	8 × 9	.493	12,52	.542	13,77	7 5/8	194	3	85
SBM1011	10 × 11	.591	15,01	.641	16,28	7 5/8	194	3	85
SBM1213	12 × 13	.691	17,55	.741	18,82	9	229	6	170
SBM1415	14 × 15	.792	20,12	.841	21,36	9	229	6	170
SBM1617	16 × 17	.895	22,73	.943	23,95	10 1/2	267	12	340
SBM1819	18 × 19	.992	25,20	1.045	26,54	10 1/2	267	12	340
SBM2022	20 × 22	1.099	27,91	1.200	30,48	12 1/2	317	1 3	539
SBM2123	21 × 23	1.148	29,16	1.247	31,67	12 1/2	317	1 3	539
SBM2427	24 × 27	1.304	33,12	1.452	36,88	13 7/8	352	1 11	766



SETS

Set No. in Roll	Sizes	Pieces per Set	Weight per Set	
			lb. oz.	g.
2530R	1/8 × 3/16, 1/4 × 3/16, 3/8 × 7/16, 1/2 × 9/16 Whit.	4	3 4	1474
2531R	3/8 × 1/16, 1/2 × 9/16, 5/8 × 11/16, 3/4 × 7/8, 13/16 × 1 1/16 Across Flats	5	3 13	1729
2532R	8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.	6	2 13	1275
2533R	8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19, 20 × 22, 21 × 23, 24 × 27 mm.	9	7 2	3232

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.



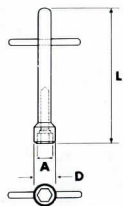


MIDGET WRENCHES "TEEKEE"

Specially adapted for use on instruments, telephones, typewriters, electrical and radio apparatus. The stem of the wrench is bored for clearance.

THE K SERIES—HEXAGON THE KX SERIES—SQUARE

No.	A Nominal Size Across Flats		EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
			B.A.	Whit.	UNIFIED						
	in.	mm.				Nut size & Series	in.	mm.	in.	mm.	lb. oz.
K172	172	—	7	1/16	—	.312	7,94	23/4	70	5	142
K187	3/16	—	—	—	4Mp	.312	7,94	23/4	70	5	142
K196	—	5	6	—	—	.312	7,94	23/4	70	5	142
K220	3/32	—	5	—	—	.375	9,52	3	76	7	198
K236	—	6	—	—	—	.375	9,52	3	76	7	198
K250	1/4	—	4	3/32	4Mp 6MP	.375	9,52	3	76	7	198
K276	—	7	—	—	—	.437	11,11	3 1/4	82	10	283
K282	3/32	—	3	—	—	.437	11,11	3 1/4	82	9	255
K315	3/16	8	—	—	6MP 8MP	.500	12,70	3 1/2	89	13	368
K324	3/16	324	2	—	—	.500	12,70	3 1/2	89	13	368
K343	1/32	—	—	1/8	8MP 10MP	.500	12,70	3 1/2	89	13	368
K354	—	9	—	—	—	.562	14,29	3 3/4	95	1 0	454
K365	.365	—	1	—	—	.562	14,29	3 3/4	95	1 0	454
K375	3/8	—	—	—	10MP	.562	14,29	3 3/4	95	1 0	454
K393	1/2	10	—	—	—	.562	14,29	3 3/4	95	1 0	454
K413	1 1/32	—	0	—	—	.625	15,87	4	102	1 5	596
KX250	1/4	—	6	1/8	—	.500	12,70	3 1/2	89	13	368
KX312	3/16	—	4	3/32	—	.562	14,29	3 3/4	95	1 1	482
KX375	3/8	—	2	1/16	—	.687	17,46	4	102	1 8	681



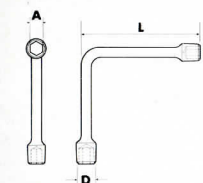
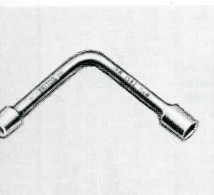
Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

"L" HANDLE WRENCHES

Forged from the solid bar

THE 1580 SERIES

No.	A Nominal Sizes Across Flats in.	Equivalent Whit.	D Maximum Outside Diameter of Socket				L Nominal Shank Length		Weight Each	
			Small End		Large End					
			in.	mm.	in.	mm.	in.	mm.	lb. oz.	g.
1581	.445 × .525	3/16 × 1/4	.750	19,05	.812	20,64	4	102	6 1/2	184
1582	.525 × .600	1/4 × 3/16	.875	22,22	.937	23,81	5	127	11	312
1583	.600 × .710	3/16 × 5/8	.937	23,81	1.062	26,99	6	152	14	397
1584	.710 × .820	5/16 × 3/4	1.062	26,99	1.187	30,16	7	178	1 4	567
1585	.820 × .920	3/8 × 1/2	1.187	30,16	1.312	33,34	8	203	1 8	681
1586	1/2 × 1/2	UNIFIED and S.A.E. standards	.750	19,05	.812	20,64	4	102	6 1/2	184
1587	1/2 × 3/4		.875	22,22	.875	22,22	5	127	11	312
1588	3/4 × 5/8		.875	22,22	1.000	25,40	5	127	11 1/2	326
1580A	3/4 × 3/4		.875	22,22	1.125	28,57	6	152	1 0	454
1580C	5/8 × 1 1/16		1.000	25,40	1.062	26,99	6	152	14	397
1589	5/8 × 3/4		1.000	25,40	1.125	28,57	6	152	1 1	482



"QUADRENCH" WHEEL NUT WRENCHES FOR AUTOMOBILES AND LIGHT TRUCKS

These wrenches cover four popular wheel nut sizes and are available in either British or American combinations.

The sockets are forged from solid bar and the novel one piece construction gives an extremely sturdy and reliable wrench.

Made from Chrome Alloy Steel.

Finished in hard stove enamel.

Overall Length 15" (381 mm.).

No. 392

BRITISH SIZES Blue enamel finish.

Hexagon: 3/16", 3/8", 1/2", 3/4" Whitworth.

Weight 2 lb. 13 oz. each.
1275 g.

No. 393

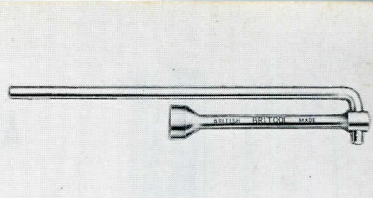
AMERICAN SIZES Red enamel finish.

Hexagon: 1/16", 3/16", 1/4", 3/8" Across Flats.

Weight 2 lb. 13 oz. each.
1275 g.

WHEEL NUT WRENCHES BENT "T" HANDLE

THE 384 SERIES



These single hexagon wrenches are forged from the solid bar and the handle is bent so that it will fold parallel with the shank. Made from Chrome Alloy Steel. Black rustproof finish.

No.	Nominal Size Across Flats In.	SOCKET SIZES			SHANKS				HANDLES				Weight Each	
		Whit.	B.S.	UNIFIED Nut Size and Series	Length		Diameter		Length		Diameter			
					in.	mm.	in.	mm.	in.	mm.	in.	mm.	lb. oz.	g.
384	.920	1/2	3/16	—	16	406	7/8	22.2	24	610	3/4	19	6 4	2835
384	1-100	5/8	1/16	—	16	406	7/8	22.2	24	610	3/4	19	6 4	2835
384	1-300	3/4	7/16	—	16	406	7/8	22.2	24	610	3/4	19	6 8	2949
384	1-480	7/8	1	—	16	406	7/8	22.2	24	610	3/4	19	6 8	2949
384	1 1/8	—	—	3/4N	16	406	7/8	22.2	24	610	3/4	19	6 3	2807
384	1 3/8	—	—	7/8N	16	406	7/8	22.2	24	610	3/4	19	6 8	2949
384	1 1/2	—	—	1N	16	406	7/8	22.2	24	610	3/4	19	6 8	2949

WHEEL NUT SET No. 386

FOR AUTOMOBILES, VANS AND LIGHT TRUCKS

This one-piece wheel nut set covers the sizes used by the major British automobile manufacturers and its range is further extended by the provision of a 1/2" square drive male end to which suitable interchangeable sockets may be affixed. The BRITTOOL range of PEH Impact hexagon sockets listed on page 64 is recommended.

Each arm is clearly marked with the socket sizes.

No. 386 Wheel Nut Set.

Whitworth sizes - 3/8", 7/16", 1/2".

American sizes - 1/16", 3/4" Across Flats.

Square Plug - 1/2" Across Flats (12.7 mm.)

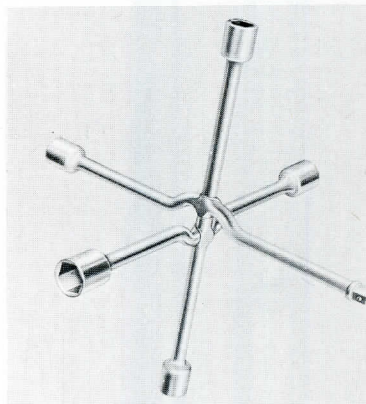
Overall Length - 15" (381 mm.).

Weight 4 lb. each

1814 g.

Boxed quantity—5

Suitable for:— Austin, Bentley, Bristol, Buick, Cadillac, Ford, Hillman, Humber, Jaguar, M.G., Morgan, Riley, Rolls Royce, Rover, Singer, Standard Triumph, Sunbeam Talbot, Vanden Plas, Vauxhall, Volkswagen, Volvo, Wolseley.



Made from Chrome Alloy Steel.
Bright plated finish.

"CAPSTAN" WHEEL NUT SETS FOR TRUCKS

These wrenches cover the popular wheel nut sizes and include a 3/4" square drive male end and shank to which interchangeable sockets may be affixed. The PHH series Impact sockets listed on page 67 are recommended.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

No. 390/3

5 Socket sizes as follows:—

Whitworth sizes - 1/2", 7/16", 5/8", 1 1/16", 3/4".

Square Plug - 3/4" Across Flats

Weight 14 lb. each

Overall Length - 24" (610 mm.)

6350 g.

No. 391/3

5 Socket sizes as follows:—

American sizes - 7/8", 1 1/8", 1 1/4", 1 1/2" Across Flats Hexagon.

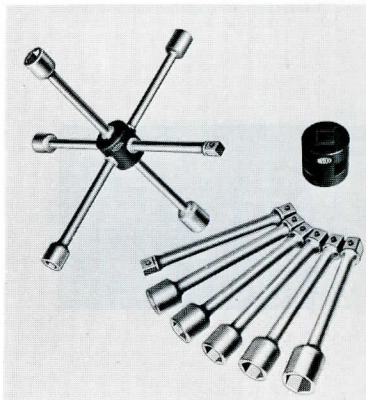
also 1 1/16" Across Flats SQUARE.

Square Plug - 3/4" Across Flats

Weight 15 lb. each

Overall Length - 24" (610 mm.)

6804 g.



REVERSIBLE "PRE-SETTING" ADJUSTABLE TORQUE WRENCHES

These wrenches have been proved both reliable and accurate over a period of years in full service and have successfully mastered practically every kind of nut tightening operation in all branches of industry.

It is fast becoming standard practice for designers or manufacturers of component parts to issue recommended torque loads and the importance of these figures cannot be over-emphasised. They are vital to the engineer or mechanic for servicing and repairs and also to industries where mass production techniques are employed.

Whatever the location, BRITOL torque wrenches ensure that tightening torques are applied with the highest degree of accuracy and minimum of effort.

Their patented construction incorporates many desirable features and these may be summarised as follows:—

Three phase **SAFETY** signal by **TOUCH**, **SIGHT** and **SOUND**.

"Push through" movable square drive permits use on both left and right hand threads.

Extremely robust construction with nothing to go wrong or get damaged.

Maximum accessibility at socket end.

Positive setting without the need for a special setting rig or machine.

Four separate scales graduated in

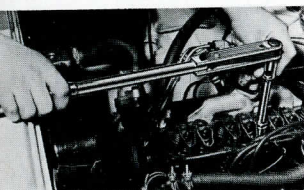
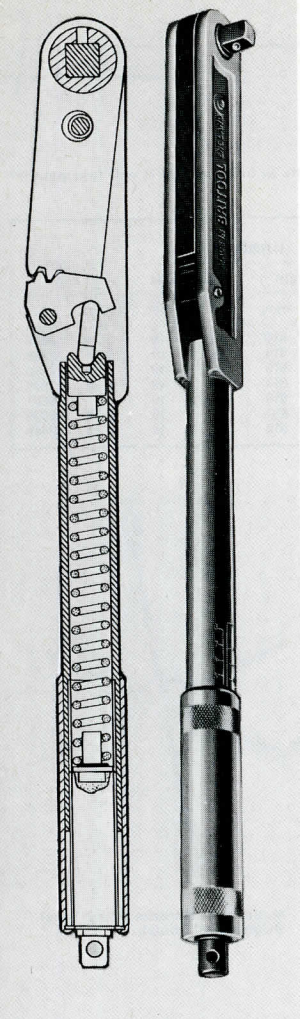
1. Pound-inches (except GVT 8400).
2. Pound-feet.
3. Kilogramme-meters.
4. Newton-meters.

Accurate results achieved automatically by unskilled labour.

Adequate controlled leverage prevents users' fatigue.

No violent kick and no long travel between unloading and automatic resetting.

Extremely fast and simple to use.



ALL BRITOL TORQUE WRENCHES ARE MANUFACTURED
TO A CALIBRATION TOLERANCE OF PLUS OR MINUS 3%.

TORQUE RANGE AND SPECIFICATION

Wrench No.	TORQUE RANGE				Square Drive		Overall Length		Weight Each in Carton	
	lb./in.	lb./ft.	Kilogramme —meters	Newton —meters	in.	mm.	in.	mm.	lb. oz.	g.
AVT100	20 to 100	2 to 8	0.276 to 1.106	3.5 to 11	3/8	9.52	11 1/2	292	1 4	567
AVT300	40 to 300	4 to 25	0.553 to 3.500	5 to 33	3/8	9.52	16	406	1 9	709
EVT600	100 to 600	10 to 50	1.382 to 7.000	12 to 68	1/2	12.7	18	457	2 3	992
EVT1200	200 to 1200	20 to 100	2.764 to 13.820	25 to 135	1/2	12.7	20 1/2	521	3 7	1559
EVT2000	400 to 2000	34 to 166	4.700 to 22.900	50 to 225	1/2	12.7	22 1/2	571	4 14	2211
EVT3000	600 to 3000	50 to 250	7.000 to 35.000	70 to 330	1/2	12.7	31	787	6 11	3034
HVT5000	1200 to 5000	100 to 417	13.820 to 57.629	140 to 560	3/4	19.05	44 1/2	1130	14 8	6576
GVT8400	4200 to 8400	350 to 700	48.370 to 96.740	480 to 950	1	25.4	55	1397	28 0	12700

NOTE

The suffixes "/R" and "/RR" previously incorporated in torque wrench numbers have been deleted to comply with requirements of computerisation. This change is for coding purposes only and the new numbers refer to wrenches which have identical specifications to those listed in the previous No. 107 catalogue, except for new Model AVT300.

A76 Unit Ratchet. (Lever operated). 3/8" square drive. Weight **11 oz.** each.
312 g.

E67 Unit Ratchet. (Lever operated). 1/2" square drive. Weight **11 oz.** each.
312 g.

H76 Unit Ratchet. (Lever operated). 3/4" square drive. Weight **3 lb. 1 oz.** each.
1389 g.

Wrench No.	Application
AVT100	Scientific instruments and meters, auxiliary aircraft and engine equipment.
AVT300	Light assembly and manufacturing processes especially with non-ferrous metals.
EVT600	Light engines, compressors, machinery and manufacturing processes.
EVT1200	Light and medium vehicle engines and chassis, marine engines, aircraft and machine tools.
EVT2000	Medium and heavy vehicles, marine auxiliary and agricultural engines, industrial machinery.
EVT3000	Heavy road vehicles, marine and diesel engines, agricultural and earth moving equipment, machine tools.
HVT5000	Heavy machinery, equipment and transmissions, locomotives, steam and hydraulic equipment.
GVT8400	Heavy static marine and diesel engines, generating equipment.

INSTRUCTIONS FOR SETTING AND OPERATION

POSITIONING THE SQUARE DRIVE

The square drive plug is movable and can be pushed through the wrench in both directions.

For right hand threads, the plug should be level with the side plate containing the words "Made in BRITool England" and projecting beyond the side plate containing the wrench number.

For left hand threads, the plug should be level with the side plate containing the wrench number and projecting beyond the side plate containing the words "Made in BRITool England".

TO SET THE WRENCH

Insert the tommy bar provided through the hole at the extreme end of the handle. When the bar is turned, the bevelled edge of the knurled handle sleeve moves backwards or forwards along the barrel of the wrench and passes over clearly marked scales.

The wrench is correctly loaded when the thin extremity of the bevel cuts across the scale at the graduation mark corresponding to the required torque load.

The handle sleeve is free to rotate. This is intentional and prevents any accidental alteration to the setting.

TO OPERATE THE WRENCH

- Fix the correct size socket to the square drive and place squarely on the nut.
- Grip the wrench at the knurled handle sleeve and pull or push IN THE DIRECTION OF THE ARROW MARKED ON THE SIDE PLATES. This should be done with a continuously controlled movement.
- When the set torque has been applied, a loud metallic 'click' will be heard. **AT THIS POINT DO NOT PULL OR PUSH FURTHER.**
- Relax the force on the handle and allow the wrench to return to its original position. In doing so, it automatically resets itself and is ready for instant use again at the same setting.
- Remember that a torque wrench is a precision instrument, in its class, and it should not be used on jobs outside those for which it is designed. Special attention should be given to wrenches which, through their location, are likely to accumulate excessive dirt or grit.

RECOMMENDED TIGHTENING TORQUES (lb./ft.) AND APPROXIMATE INDUCED BOLT TENSIONS (lb.)

Figures refer to 'self-colour', unlubricated bolts used for normal applications.

Safe Working Strength taken as 80% of the Yield Strength.

Steel qualities refer to British Standard classifications.

Nominal Bolt Size		'A' QUALITY 15 Tons per sq. in. Yield				'P' QUALITY 22 Tons per sq. in. Yield				'R' QUALITY 34 Tons per sq. in. Yield			
		TORQUE lb./ft.		BOLT TENSION lb.		TORQUE lb./ft.		BOLT TENSION lb.		TORQUE lb./ft.		BOLT TENSION lb.	
B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.
8	2	-154	-150	107	105	-226	-220	157	154	-350	-341	243	238
7	3	-228	-231	139	140	-335	-338	204	205	-517	-523	316	317
6	4	-322	-326	176	175	-473	-478	258	256	-731	-739	398	396
5	5	-489	-459	233	220	-717	-673	341	323	-1-01	-1-04	528	500
4	6	-699	-624	296	271	-1-03	-916	434	398	-1-58	-1-42	671	615
3	8	1-04	1-07	387	392	1-21	1-57	568	576	2-36	2-43	877	890
2	10	1-59	1-69	516	535	2-33	2-48	757	785	3-61	3-84	1170	1210
1	12	2-30	2-49	660	691	3-37	3-65	968	1010	5-20	5-64	1500	1570
0	—	3-35	—	851	—	4-91	—	1250	—	7-60	—	1930	—
in.		Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.
1/4		4	4	860	960	5	6	1260	1400	8	9	1950	2170
5/16		7	8	1420	1520	11	12	2080	2230	17	18	3210	3450
3/8		13	14	2090	2260	19	21	3070	3310	30	32	4750	5120
1/2		21	22	2870	3110	31	33	4210	4560	47	51	6510	7060
5/8		31	34	3720	4090	46	50	5460	5990	70	77	8440	9260
3/4		46	50	4920	5320	68	73	7210	7810	105	112	11150	12060
1		63	68	6100	6530	93	100	8950	9580	145	155	13830	14810
1 1/8		113	118	9030	9460	166	173	13240	13880	255	268	20470	21450
1 1/4		182	191	12450	13090	266	280	18250	19200	410	432	28210	29670
1 1/2		272	288	16340	17250	400	422	23970	25310	620	650	37050	39120
1 3/8		388	410	20430	21700	567	602	30240	32120	—	—	—	—

Nominal Bolt Size		'S' QUALITY 38 Tons per sq. in. Yield				'T' QUALITY 44 Tons per sq. in. Yield				'X' QUALITY 63 Tons per sq. in. Yield			
		TORQUE lb./ft.		BOLT TENSION lb.		TORQUE lb./ft.		BOLT TENSION lb.		TORQUE lb./ft.		BOLT TENSION lb.	
B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.	B.A.	U.N.F.
8	2	-392	-381	271	266	-453	-440	314	308	-649	-631	449	440
7	3	-578	-584	353	354	-670	-676	408	410	-959	-969	585	587
6	4	-817	-826	445	443	-946	-956	515	512	1-35	1-37	797	734
5	5	1-24	1-16	590	558	1-43	1-35	683	646	2-05	1-93	978	926
4	6	1-77	1-58	750	688	2-06	1-83	868	796	2-94	2-62	1243	1140
3	8	2-64	2-72	960	994	2-42	3-14	1136	1150	4-37	4-51	1626	1650
2	10	4-03	4-29	1310	1350	4-66	4-96	1510	1570	6-69	7-11	2170	2250
1	12	5-81	6-30	1670	1750	6-74	7-30	1940	2020	9-64	10-4	2770	2900
0	—	8-49	—	2160	—	9-82	—	2500	—	14-1	—	3580	—
in.		Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.	Whit. U.N.C.	B.S.F. U.N.F.
1/4		9	10	2180	2420	10	12	2520	2800	15	17	3610	4020
5/16		19	20	3590	3860	22	24	4160	4460	31	33	5950	6400
3/8		33	36	5300	5710	38	41	6140	6620	55	59	8790	9470
1/2		53	57	7280	7890	62	66	8420	9120	85	95	12070	13070
5/8		79	86	9430	10350	91	100	10920	11980	130	143	15640	17160
3/4		117	126	12460	13480	135	146	14420	15620	194	209	20660	22350
1		161	172	15460	16550	186	200	17900	19160	267	286	25630	27430
1 1/8		294	300	22880	23670	331	357	26480	27760	475	485	37940	39740
1 1/4		460	484	31530	32400	532	560	36500	38400	—	—	—	—
1 3/8		690	729	41400	43720	—	—	—	—	—	—	—	—

To convert lb./ft. into Newton-Meters—multiply by 1.356

To convert lb./ft. into lb./in.—multiply by 12.

To convert lb./in. into Gram/Meters—multiply by 11.5.

To convert lb./ft. into Kilogram/Meters—multiply by 0.138.

To convert lb. into Kilogrammes—multiply by 0.454.

TORQUE LOAD CALCULATIONS

The application of a torque load puts a bolt into a state of tension and this "torque/tension relationship" is of great importance to the designer. It is very desirable to know the torque load required to meet specific conditions and also the effect it has on the bolt. The following examples show how these values may be obtained.

BASIC FORMULA TO DETERMINE TORQUE LOAD

$$\text{Torque Load (lb./ft.)} = \frac{0.2 \times \text{Bolt Load (lb.)} \times \text{Nominal Bolt Diameter (in.)}}{12}$$

$$\text{Torque Load (Kg./m.)} = \frac{0.2 \times \text{Bolt Load (Kg.)} \times \text{Nominal Bolt Diameter (mm.)}}{1000}$$

EXAMPLE 1

It is required to put a load of 5000 lb. into a $\frac{3}{4}$ " Whitworth 'P' quality bolt. What torque should be applied?

$$\begin{aligned} \text{Torque Load (lb./ft.)} &= \frac{0.2 \times \text{Bolt Load (lb.)} \times \text{Nominal Bolt Diameter (in.)}}{12} \\ &= \frac{0.2 \times 5000 \times .750}{12} = 62.5 \text{ lb./ft.} \end{aligned}$$

In this type of problem it is only necessary to substitute the bolt load and diameter in the formula. It should be ascertained however that the required bolt load would not produce conditions in excess of the safe working strength. The formulae for calculating this are used in the next example.

EXAMPLE 2

What torque load would stress a $\frac{3}{4}$ " Whitworth 'P' quality bolt to its safe working limit?

Stage 1

$$\begin{aligned} \text{Bolt Stress Area (sq. in.)} &= \pi \left\{ \frac{\text{Effective Diameter (in.)} + \text{Minor Diameter (in.)}}{4} \right\}^2 \\ &= \pi \left\{ \frac{.686 + .622}{4} \right\}^2 = .3359 \text{ sq. in.} \end{aligned}$$

Stage 2

Safe Tensile Strength of Bolt (lb.) = Safe Working Strength of Bolt Material (lb./sq. in.) $\times$ Stress Area (sq. in.).

For a 'P' quality bolt the Yield Strength is specified as 22 tons per sq. in.

The safe working strength of the bolt material is taken as 80% of the Yield Strength i.e. 80% of 22 tons/sq. in. = 17.6 tons = 39,425 lb./sq. in.

$$\text{Safe Tensile Strength of Bolt} = 39,425 \times .3359 = 13240 \text{ lb.}$$

Stage 3

$$\begin{aligned} \text{Torque Load (lb./ft.)} &= \frac{0.2 \times \text{Bolt Load (lb.)} \times \text{Nominal Bolt Diameter (in.)}}{12} \\ &= \frac{0.2 \times 13240 \times .750}{12} = 166 \text{ lb./ft.} \end{aligned}$$

IMPORTANT

1. The formula used in Example 2 for calculating the Bolt Stress Area applies to symmetrical threads only. For asymmetrical threads (Unified) the following formula must be used:-

$$\text{Stress Area} = 0.7854 \times \left\{ D - \frac{0.9743}{n} \right\}^2$$

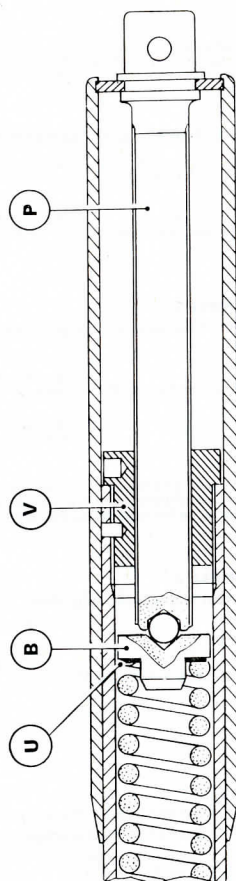
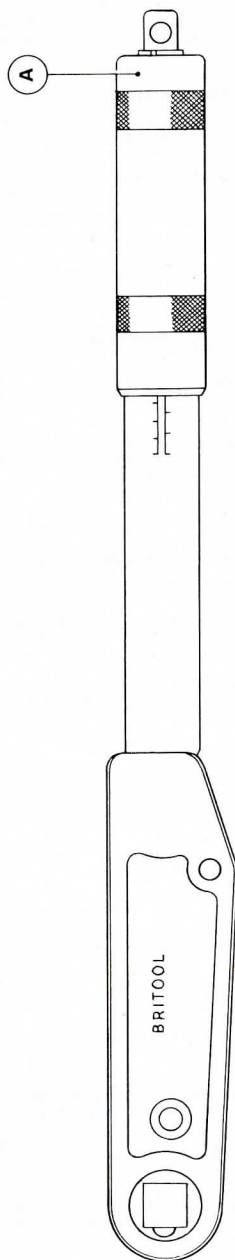
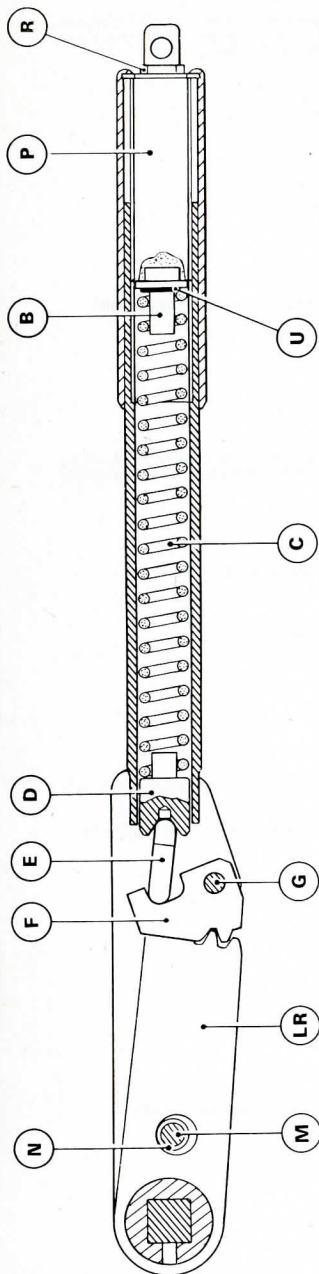
Where D = Major diameter of bolt.
n = Threads per inch.

2. In the basic formula, 0.2 is a constant, 12 = conversion factor from in. to ft.
1000 = conversion factor from mm. to m.

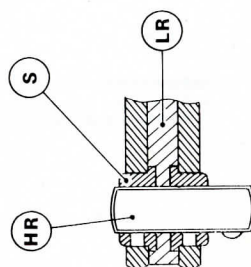
The formula does not take into account special lubricants, plating, or the effects of shock loads, extremes of temperature or severe service.

All of these factors may vary frictional conditions and have a significant effect on the torque figures.





HVT5000
HVT5000/RR
GVT 8400
GVT 8400/R



TORQUE WRENCH SPARE PARTS

This table gives correct descriptions for the parts identified by reference letters on the drawing above and also shows on which models a particular part is common. The same symbol appearing under two or more wrench numbers indicates that the part, described on that line, is interchangeable between those wrenches.

REF. LETTER	DESCRIPTION OF PART	WRENCH NUMBERS										
		AVT 100 AVT 100/R	* AVT 280/R	AVT 300 AVT 300/RR	EVT 600 EVT 600/RR	EVT 1200 EVT 1200/RR	EVT 2000 EVT 2000/RR	EVT 3000 EVT 3000/RR	HVT 5000 HVT 5000/RR	GVT 8400 GVT 8400/R		
A	Knurled Handle Sleeve		■	■	■		●					
B	Spring Adjuster Plug		●	●	●		■	■				
C	Spring			■	■							
D	Plunger		▲	▲	▲		●	●				
E	Toggle	■	■	■			◆	◆				
F	Pinion Link	●	●	●			◆	◆				
G	Pinion Link Pivot Pin	▲	▲	▲			●	●				
HR	Square Drive	■	■	■		▲	▲	▲				
LR	Gear Link	●	●	●			▲	▲				
M	Gear Link Retaining Pin	▲	▲	▲		●	■	■				
N	Spacing Washer	■	■	■			◆	◆				
P	Adjusting Screw		●	●	●		■					
R	Circlip	▲	▲	▲	▲		●	●	●			
S	Square Drive Bushes	●	●	●	■	■	▲	▲				
U	Packing Washers	▲	▲	▲	▲		●	●	●			
V	Barrel Plug					Used on HVT and GVT models only.						

*Discontinued

IMPORTANT To ensure correct calibration, a new Spring (c) can only be supplied complete with Spring Adjuster Plug (B) and the requisite number of Packing Washers (U). These parts must be kept together prior to assembly in the wrench.

TO ORDER A REPLACEMENT PART—prefix the letter reference for the part required with the wrench number which will be found on one of the wrench side plates.

Example—Wrench No. EVT 1200-RR, Part required is Toggle (E). Quote EVT 1200/RR/E.

"TURNTORQ"

ROTARY TORQUE WRENCH

The precision tightening or adjustment of small screws, nuts or bolts is one of the major problems confronting Engineers concerned with production, service and maintenance work.

The **BRITOL DT 57 "TURNTORQ"** provides the perfect answer to torquing problems of this nature and it can be used by unskilled labour with every confidence.

Note some of the many advantages of this tool:—

1. Foolproof and positive action.
2. Maintained accuracy over long periods.
3. Unaffected by temperature changes.
4. Requires no special setting rig.
5. Graduated in lb./inches **AND** gram/meters on easily read scales.
6. Operates on either clockwise or anti-clockwise rotation.
7. Three phase signal by Touch, Sight and Sound denotes release when set load has been achieved.
8. Positively cannot overtighten.
9. Construction of tool provides minimum of friction.
10. Accepts all standard 1/4" square drive sockets, screwdriver bits, convertors, etc.
11. Each wrench individually tested and inspected throughout construction and before final release.
12. Each "TURNTORQ" is housed in a light density two-piece moulded pack which is both dustproof and shockproof and provides maximum protection during transit and storage.

No. DT 57 Overall Length - 7 1/4" (184 mm.)
 Drive End - 1/4" Square
 Adjustable Range - 0-45 lb./inches
 0-515 Gram/Meters

Weight 15 oz. each.
 425 g.

Full operating instructions supplied with each wrench.

Finish - Red fluted barrel.

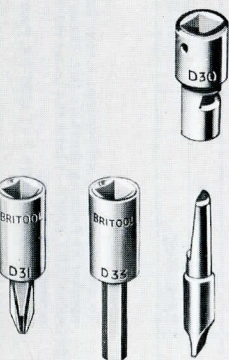
Black rustproof drive end and adjusting screw.

Remainder bright nickel and chrome plate.

TURNTORQ WRENCH SETTINGS

(Suggested standard loadings where specific figures are not available)

Nominal Bolt Size	'A' QUALITY		'P' QUALITY		'R' QUALITY		'X' QUALITY	
	TORQUE		TORQUE		TORQUE		TORQUE	
B.A.	U.N.F.	lb./in.	Gram-Meters	lb./in.	Gram-Meters	lb./in.	Gram-Meters	Gram-Meters
1	—	41-25	480	—	—	—	—	—
2	10	27-5	320	35-0	405	45-0	515	—
3	8	18-75	220	22-5	260	30-0	348	—
4	6	12-5	145	15-0	174	20-0	232	33-75
5	5	8-75	102	11-25	130	13-75	160	23-75
6	4	5-0	58	7-5	86	10-0	116	15-0
7	3	3-75	43	5-0	58	6-25	73	11-25
8	2	2-5	29	3-75	43	5-0	58	7-5
								86



TORQUE WRENCH TESTING MACHINE No. 8000

This machine has been specially designed to provide an efficient means of checking the performance of torque wrenches in general and BRITool torque wrenches in particular. It will be found the ideal instrument for the regular inspection of wrenches which are in continuous operation on assembly or production lines and also where wrenches are serviced or repaired by the user.

Readings are quickly and easily obtained by pre-loading the balancing beam with accurate weights, equivalent to the required torque load, and checking the wrench setting against that of the machine. This method gives a finer degree of control than is obtained with machines incorporating a spring balance and pointer particularly as the operation of BRITool torque wrenches requires a partial release of the load within the wrench to indicate that the set torque has been applied.

The machine can be adapted to give DIRECT readings in either English or Metric units simply by re-positioning the counter-weight and additional weight cradle. The balancing beam is clearly graduated with separate scales and settings up to 500 pound-inches and 500 kilogramme-centimeters are immediately obtainable by using the sliding weight. Additional weights are placed in the cradle to make up heavier settings.

Overall dimensions have been kept to a minimum and a basic area of only $21" \times 2\frac{1}{4}"$ (533×57 mm.) is required for installation.

The machine is fully lubricated and attractively finished in crinkle black enamel and dull chrome plate. Sockets are provided in $\frac{1}{8}"$, $\frac{1}{2}"$, and $\frac{3}{4}"$ square drive.

A fully illustrated instruction booklet is supplied with each machine.

No. 8000 Torque Wrench Testing Machine

Overall dimensions - $21" \times 10\frac{1}{2}" \times 3"$ ($533 \times 267 \times 76$ mm.)

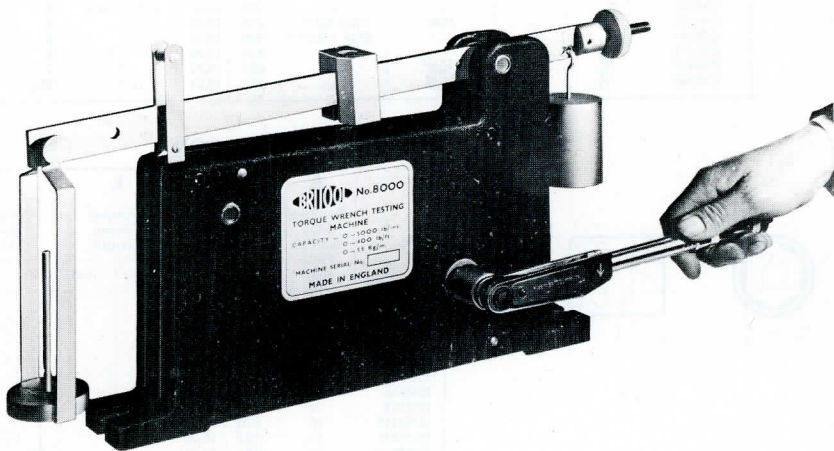
Capacity - 0-5,000 lb./in.

0-400 lb./ft.

0-55 Kg./m.

Weight - 70 lb. (31750 g.) complete in case.

46 lb. (20412 g.) machine and accessories only.



1/4"



IMPACT SOCKETS AND ACCESSORIES

All the sockets and accessories listed on the following pages (with the exception of 1/4" square drive) have been specially designed for use with Impact tools and power operated industrial equipment.

Power tools for which they are suitable include those manufactured by INGERSOLL RAND, THOR TOOLS, THOR POWER TOOLS, DESOUTTER, BLACK & DECKER, CONSOLIDATED PNEUMATIC, ATLAS COPCO, and others.

Stock sizes constitute a fully comprehensive range, but larger sizes and patterns can be produced where required including sockets in 1 1/2", 2 1/2" and 3 1/2" square drives.

BRITISH SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		Whit.	B.A.	in.	mm.	in.	mm.	oz.	g.
DH152	.152	—	8	.299	7.59	All -875	22.2	4 1/2	127
DH172	.172	—	7	.315	8.00			4 1/2	127
DH193	.193	—	6	.315	8.00			4 1/2	127
DH220	.220	—	5	.355	9.02			4 1/2	127
DH248	.248	—	4	.390	9.91			4 1/2	127
DH282	.282	—	3	.432	10.97			6	170
DH324	.324	—	2	.474	12.04			6	170
DH338	.338	1/8	—	.500	12.70			6	170
DH365	.365	—	1	.544	13.82			6	170
DH413	.413	—	0	.607	15.42			7	198
DH445	.445	3/16	—	.625	15.87			7	198

1/4" SQUARE DRIVE

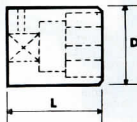
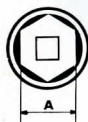
Made from Chrome Alloy Steel.
Bright nickel and chrome plated finish to
B.S. 1224: 1970, service condition No. 1.
Ball retaining hole.

UNIFIED AND AMERICAN SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	S.A.E.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
			UNIFIED		in.	mm.	in.	mm.	oz.	g.
			Bolt dia. and Series	Nut Size and Series						
DH187	3/16	—	4M	4MP	.315	8.00	All -875	22.2	4 1/2	127
DH219	1/2	—	—	—	.355	9.02			4 1/2	127
DH234	15/64	—	—	—	.375	9.52			4 1/2	127
DH250	1/4	—	6 & 8M	4Mp 6MP	.390	9.91			4 1/2	127
DH266	17/64	—	—	—	.405	10.29			4 1/2	127
DH281	9/32	—	—	—	.432	10.97			6	170
DH312	5/16	—	10M	6Mp 8MP	.474	12.04			6	170
DH344	11/32	—	—	8Mp 10MP	.500	12.70			6	170
DH375	3/8	—	—	10Mp	.544	13.82			6	170
DH437	7/16	1/4	1/4N	1/4N	.625	15.87			7	198
DH500	1/2	5/16	5/16N	5/16N	.718	18.24			9 1/2	269

METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	oz.	g.
DHM4	4	.271	6.88	All -875	22.2	4	113
DHM4,5	4,5	.292	7.42			4	113
DHM5	5	.318	8.08			4	113
DHM5,5	5,5	.344	8.74			4	113
DHM6	6	.371	9.42			4	113
DHM7	7	.423	10.74			4	113
DHM8	8	.474	12.04			4	113
DHM9	9	.525	13.33			5 1/2	156
DHM10	10	.576	14.63			7	198
DHM11	11	.627	15.92			7	198
DHM12	12	.680	17.27			8 1/2	241
DHM13	13	.732	18.59			10	283
DHM14	14	.781	19.84			11	312
DHM15	15	.817	20.75			11	312



3/8" SQUARE DRIVE

IMPACT SOCKETS

AND ACCESSORIES

Drilled for Retaining Ball.



ACCESSORIES

Extension—Socket and Plug Ends.

PA96 3" overall (76 mm.).

Weight 4½ oz. each.

127 g.



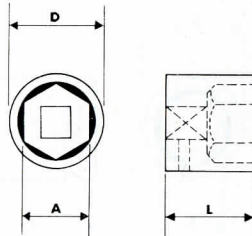
BRITISH, UNIFIED AND AMERICAN SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE				D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		Whit. or B.A.	B.S.	Unified	S.A.E.	in.	mm.	in.	mm.	lb. oz.	g
PAH282	.282	3	—	—	—	.458	11,63	1-000	25,4	8	227
PAH324	.324	—	—	—	—	.515	13,08	1-000	25,4	8	227
PAH338	.338	1/8	—	—	—	.533	13,54	1-000	25,4	8	227
PAH365	.365	1	—	—	—	.567	14,40	1-000	25,4	8 1/2	241
PAH413	.413	0	—	—	—	.630	16,00	1-000	25,4	8 1/2	241
PAH445	.445	3/16	1/4	—	—	.689	17,50	1-000	25,4	9 1/2	269
PAH525	.525	—	3/8	—	—	.779	19,79	1-000	25,4	12 1/2	354
PAH600	.600	5/16	3/8	—	—	.878	22,30	1-000	25,4	1 0	454
PAH710	.710	3/8	7/16	—	—	1-024	26,01	1-000	25,4	1 7	652
PAH820	.820	7/16	1/2	—	—	1-169	29,69	1-093	27,8	2 2	964
PAH312	3/16	—	—	6Mp 8MP	—	.499	12,67	1-000	25,4	8	227
PAH344	1/32	—	—	8Mp 10MP	—	.541	13,74	1-000	25,4	8	227
PAH375	3/8	—	—	10MP	—	.582	14,78	1-000	25,4	8	227
PAH437	7/16	—	—	1/4N	1/4	.664	16,86	1-000	25,4	9	255
PAH500	1/2	—	—	5/16N	5/16	.746	18,95	1-000	25,4	11 1/2	326
PAH562	9/16	—	—	3/8N	3/8	.828	21,03	1-000	25,4	13	368
PAH625	5/8	—	—	7/16N	7/16	.913	23,19	1-000	25,4	1 2	511
PAH687	11/16	—	—	1/2N	1/2	.995	25,27	1-000	25,4	1 6	624
PAH750	3/4	—	—	—	—	1-076	27,33	1-062	27,0	1 11	766
PAH812	13/16	—	—	—	—	1-155	29,34	1-093	27,8	2 1	935
DEEP SOCKETS											
PAHD437	7/16	—	—	1/4N	1/4	.664	16,86	1-562	39,7	15	425
PAHD562	9/16	—	—	3/8N	3/8	.828	21,03	1-562	39,7	1 6	624
PAHD687	11/16	—	—	1/2N	1/2	.995	25,27	1-562	39,7	2 3	992

METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight per 10	
		in.	mm.	in.	mm.	lb. oz.	g.
PAHM7	7	.450	11,43	1-000	25,4	8	227
PAHM8	8	.505	12,83	1-000	25,4	8	227
PAHM9	9	.553	14,05	1-000	25,4	8	227
PAHM10	10	.608	15,44	1-000	25,4	9	255
PAHM11	11	.658	16,71	1-000	25,4	9	255
PAHM12	12	.710	18,03	1-000	25,4	10	283
PAHM13	13	.757	19,23	1-000	25,4	12	340
PAHM14	14	.813	20,65	1-000	25,4	13	368
PAHM15	15	.865	21,97	1-000	25,4	1 1	482
PAHM16	16	.917	23,29	1-000	25,4	1 3	539
PAHM17	17	.966	24,54	1-000	25,4	1 5	596
PAHM18	18	1-022	25,96	1-000	25,4	1 7	652
PAHM19	19	1-074	27,28	1-062	27,0	1 12	794
PAHM20	20	1-126	28,60	1-093	27,8	1 15	879

Made from Chrome Alloy Steel.
Black rustproof finish.



1/2"



1/2" SQUARE DRIVE

IMPACT SOCKETS AND ACCESSORIES

"O" Ring and Pin Fitting

ACCESSORIES

No.	Description	Weight Each	
		lb. oz.	g.
PE91	Universal Joint. Two-piece Impact type	9	255
PE96	Extension, 3" overall (76 mm.)	6 1/2	184
PE97	Extension, 6" overall (152 mm.)	11	312
PE98	Extension, 12" overall (305 mm.)	1 3	539
*APES	Converter, 3/8" Sq. Plug x 1/2" Sq. Socket	2 1/2	71
ESFP	Converter, 1/2" Sq. Socket x 3/4" Sq. Plug	5	142

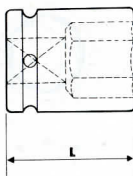
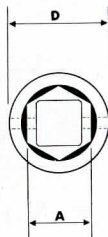
* Not guaranteed.

BRITISH, UNIFIED AND AMERICAN SIZES—HEXAGON

No.	Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE				D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	Unified	S.A.E.	in.	mm.	in.	mm.	oz.	g.
PEH445	.445	3/16	1/4	—	—	.696	17.68	1-500	38,1	3	85
PEH525	.525	1/4	3/8	—	—	.793	20.14	1-500	38,1	3	85
PEH600	.600	5/16	1/2	—	—	.906	23.01	1-500	38,1	3	85
PEH710	.710	3/8	5/8	—	—	1-062	26.99	1-500	38,1	3 1/2	99
PEH820	.820	1/2	3/4	—	—	1-196	30.38	1-500	38,1	4	113
PEH920	.920	5/8	7/8	—	—	1-334	33.88	1-625	41,3	6	170
PEH1010	1-010	3/4	1 1/8	—	—	1-446	36.73	1-687	42,9	7	198
PEH1100	1-100	7/8	1 1/4	—	—	1-562	39.69	1-750	44,4	9	255
PEH1200	1-200	1 1/8	1 3/4	—	—	1-704	43.28	1-875	47,6	11 1/2	326
PEH1300	1-300	1 1/4	2	—	—	1-847	46.93	2-000	50,8	14	397
PEH375	3/8	—	—	10Mp	—	.609	15.47	1-500	38,1	3	85
PEH437	1/2	—	—	1/4N	1/4	.687	17.45	1-500	38,1	3	85
PEH500	5/8	—	—	3/8N	3/8	.765	19.43	1-500	38,1	3	85
PEH562	3/4	—	—	1/2N	1/2	.859	21.82	1-500	38,1	3	85
PEH594	13/16	—	—	5/8N	5/8	.896	22.76	1-500	38,1	3 1/2	99
PEH625	7/8	—	—	—	3/16	.940	23.88	1-500	38,1	3 1/2	99
PEH687	1 1/16	—	—	—	1/2N	1-022	25.96	1-500	38,1	3 1/2	99
PEH750	1 1/8	—	—	—	1/2	1-105	28.07	1-500	38,1	3 1/2	99
PEH812	1 1/4	—	—	—	—	1-187	30.16	1-500	38,1	4	113
PEH875	1 1/2	—	—	1 1/2H	5/8	1-273	32.33	1-500	38,1	5	142
PEH937	1 5/8	—	—	5/8N	5/8	1-354	34.39	1-625	41,3	6 1/2	184
PEH1000	1 3/4	—	—	—	1 1/8	1-437	36.51	1-625	41,3	7	198
PEH1062	1 7/8	—	—	5/8H	3/4	1-522	38.66	1-687	42,9	8	227
PEH1125	2	—	—	3/4N	3/4	1-603	40.72	1-750	44,4	9 1/2	269
PEH1250	2 1/4	—	—	—	7/8	1-772	45.01	1-875	47,6	12	340
PEHD625	DEEP SOCKET 3/8	—	—	—	3/16	.940	23.88	2-500	63,5	5 1/2	156

"O" RINGS AND PINS TO ORDER

Made from Chrome Alloy Steel.
Black rustproof finish.



METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	oz.	g.
PEHM8	8	.562	14.28	1-500	38,1	3	85
PEHM10	10	.648	16.46	1-500	38,1	3	85
PEHM11	11	.687	17.45	1-500	38,1	3	85
PEHM12	12	.741	18.82	1-500	38,1	3	85
PEHM13	13	.794	20.17	1-500	38,1	3	85
PEHM14	14	.848	21.54	1-500	38,1	3	85
PEHM15	15	.898	22.81	1-500	38,1	3	85
PEHM16	16	.951	24.15	1-500	38,1	3 1/2	99
PEHM17	17	1-000	25.40	1-500	38,1	3 1/2	99
PEHM18	18	1-062	26.99	1-500	38,1	3 1/2	99
PEHM19	19	1-105	28.07	1-500	38,1	4	113
PEHM20	20	1-154	29.31	1-500	38,1	4 1/2	127
PEHM21	21	1-204	30.58	1-500	38,1	5	142
PEHM22	22	1-250	31.75	1-500	38,1	5 1/2	156
PEHM23	23	1-299	32.99	1-625	41,3	6	170
PEHM24	24	1-383	35.13	1-625	41,3	6	170
PEHM27	27	1-527	38.78	1-687	42,9	8	227



SURFACE SOCKETS

This range of sockets has been specially produced for use with multi-spindle equipment. The internal shape is designed so that the turning moment is applied to each flat face of the nut. Clearance is provided in the region of the nut corners and this eliminates damage to either socket or nut both at the moment of engagement and during the actual tightening. The special shape of the socket also creates a degree of free movement for the nut so permitting extremely rapid location.



"O" Ring and Pin Fitting

"O" RINGS AND PINS TO ORDER

BRITISH SIZES

No.	A To Suit Hexagon Across Flats in.	EQUIVALENT STANDARD NUT SIZE		D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	in.	mm.	in.	mm.	oz.	g.
PES525	-525	1/4	5/16	.793	20,14	1.500	38,1	3	85
PES600	-600	5/8	3/4	.906	23,01	1.500	38,1	3	85
PES710	-710	3/8	7/16	1.062	26,99	1.500	38,1	3	85
PES820	-820	7/8	1/2	1.196	30,38	1.500	38,1	4 1/2	127
PES920	-920	1/2	9/16	1.334	33,88	1.625	41,3	6	170



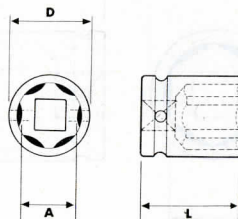
UNIFIED AND AMERICAN SIZES

No.	A To Suit Hexagon Across Flats in.	EQUIVALENT STANDARD NUT SIZE			D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		S.A.E.	UNIFIED		in.	mm.	in.	mm.	oz.	g.
			Bolt dia. and Series	Nut Size and Series						
PES437	3/16	1/4	1/4N	1/4N	.687	17,45	1.500	38,1	3	85
PES500	1/2	5/16	5/16N	5/16N	.765	19,43	1.500	38,1	3	85
PES562	9/16	3/8	3/8N	3/8N	.859	21,82	1.500	38,1	3	85
PES625	5/8	7/16	7/16N	—	.940	23,88	1.500	38,1	3	85
PES687	1 1/16	—	—	3/16N	1.022	25,96	1.500	38,1	3 1/2	99
PES750	3/4	1/2	1/2N	1/2N	1.105	28,07	1.500	38,1	3 1/2	99
PES812	1 3/16	—	—	1/4N	1.187	30,16	1.500	38,1	4	113
PES875	7/8	9/16	1/2H	1/2H 9/16N	1.273	32,33	1.500	38,1	5	142
PES937	1 5/16	5/8	5/8N	5/8N	1.354	34,39	1.625	41,3	6	170

Made from Chrome Alloy Steel.
Black rustproof finish.

METRIC SIZES

No.	A To Suit Hexagon Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	oz.	g.
PESM9	9	.586	14,88	1.500	38,1	3	85
PESM10	10	.648	16,46	1.500	38,1	3	85
PESM11	11	.687	17,45	1.500	38,1	3	85
PESM12	12	.741	18,82	1.500	38,1	3	85
PESM14	14	.848	21,54	1.500	38,1	3	85
PESM16	16	.951	24,15	1.500	38,1	3 1/2	99
PESM17	17	1.000	25,40	1.500	38,1	3 1/2	99
PESM19	19	1.105	28,07	1.500	38,1	3 1/2	99
PESM22	22	1.250	31,75	1.500	38,1	4 1/2	127
PESM24	24	1.354	34,39	1.625	41,3	6	170



5/8

5/8" SQUARE DRIVE

IMPACT SOCKETS

AND ACCESSORIES

"O" Ring and Pin Fitting



ACCESSORIES

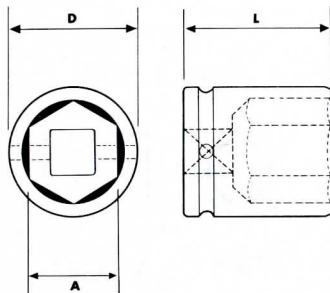
No.	Description	Weight Each	
		lb. oz.	g.
PF91 PF97	Universal Joint. Two piece impact type Extension, 6" overall (152 mm.)	1 1 1 4	482 567
*P/FSEP P/FSHP	Converter, 5/8" Sq. Socket x 1/2" Sq. Plug Converter, 5/8" Sq. Socket x 3/4" Sq. Plug	7 8	198 227

"O" RINGS AND PINS TO ORDER

* Not guaranteed.

BRITISH, UNIFIED AND AMERICAN SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	EQUIVALENT STANDARD NUT SIZE				D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	Unified	S.A.E.	in.	mm.	in.	mm.	oz.	g.
PFH525	-525	1/4	5/16	—	—	1-187	30,16	1-562	39,7	5	142
PFH600	-600	3/16	3/8	—	—	1-187	30,16	1-562	39,7	5	142
PFH710	-710	3/8	7/16	—	—	1-312	33,34	1-562	39,7	6	170
PFH920	-920	1/2	9/16	—	—	1-437	36,51	2-062	52,4	9	255
PFH1010	1-010	5/8	5/8	—	—	1-500	38,10	2-062	52,4	9 1/2	269
PFH1100	1-100	5/8	11/16	—	—	1-687	42,86	2-062	52,4	12 1/2	354
PFH1200	1-200	1 1/16	3/4	—	—	1-750	44,45	2-062	52,4	13	368
PFH625	5/8	—	—	—	3/16	1-187	30,16	1-562	39,7	5	142
PFH687	7/8	—	—	3/16N	—	1-312	33,34	1-562	39,7	6	170
PFH750	1 1/16	—	—	1/2N	—	1-312	33,34	1-562	39,7	6	170
PFH812	1 1/8	—	—	—	1/2	1-312	33,34	1-562	39,7	6	170
PFH875	1 1/4	—	—	—	—	1-312	33,34	1-562	39,7	6	170
PFH937	1 5/8	—	—	5/8N	—	1-437	36,51	2-062	52,4	9	255
PFH1000	1	—	—	—	1 1/16	1-500	38,10	2-062	52,4	9 1/2	269
PFH1062	1 1/8	—	—	5/8H	3/4	1-562	39,69	2-062	52,4	10 1/2	298
PFH1125	1 1/2	—	—	3/4H	—	1-687	42,86	2-062	52,4	12	340
PFH1250	1 3/4	—	—	3/4H	7/8	1-812	46,04	2-062	52,4	13	368



Made from Chrome Alloy Steel. Black rustproof finish.

METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	oz.	g.
PFHM19	19	1-312	33,34	1-562	39,7	6	170
PFHM23	23	1-437	36,51	2-062	52,4	9	255
PFHM26	26	1-500	38,10	2-062	52,4	9	255
PFHM29	29	1-687	42,86	2-062	52,4	14	397
PFHM32	32	1-812	46,04	2-062	52,4	14	397

ACCESSORIES

No.	Description	Weight Each	
		lb. oz.	g.
PH91	Universal Joint. Two piece Impact type	1 6	624
PH96	Extension, 3" overall (76 mm.)	1 0	454
PH82	Extension, 8" overall (203 mm.)	2 0	907
PH83	Extension, 16" overall (406 mm.)	3 13	1729
*P/EPHS	Converter, 1/2" Sq. Plug × 3/4" Sq. Socket	13	368
*P/FPHS	Converter, 5/8" Sq. Plug × 3/4" Sq. Socket	14	397
P/HSGP	Converter, 3/4" Sq. Socket × 1" Sq. Plug.	1 2	511

* Not guaranteed.

3/4" SQUARE DRIVE **3/4"**

IMPACT SOCKETS

AND ACCESSORIES

"O" Ring and Pin Fitting

"O" RINGS AND PINS TO ORDER.



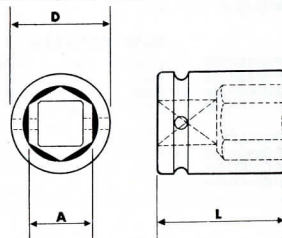
BRITISH, UNIFIED AND AMERICAN SIZES—HEXAGON

No.	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE				D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	Unified	S.A.E.	in.	mm.	in.	mm.	lb. oz.	g.
PHH710	.710	3/8	7/16	—	—	1.242	31.59	1.750	44.4	8 1/2	241
PHH820	.820	7/16	1/2	—	—	1.379	35.03	2.000	50.8	10	283
PHH920	.920	1/2	5/8	—	—	1.505	38.23	2.000	50.8	10	283
PHH1010	1.010	5/8	11/8	—	—	1.617	41.07	2.125	54.0	12	340
PHH1100	1.100	5/8	1 1/8	—	—	1.729	43.92	2.187	55.6	15	425
PHH1200	1.200	1 1/16	1 1/4	—	—	1.875	47.62	2.250	57.1	1 2	511
PHH1300	1.300	3/4	1 1/8	—	—	1.981	50.32	2.312	58.7	1 5	596
PHH1480	1.480	3/4	1	—	—	2.207	56.05	2.500	63.5	1 14	851
PHH500	1/2	—	—	5/16 N	5/16	.979	24.87	1.750	44.4	8	227
PHH562	9/16	—	—	5/16	5/16	1.057	26.85	1.750	44.4	8	227
PHH625	5/8	—	—	5/16	5/16	1.119	28.42	1.750	44.4	9	255
PHH687	11/16	—	—	5/16 N	5/16	1.214	30.83	1.875	47.6	10	283
PHH750	3/4	—	—	1/2 N	1/2	1.293	32.84	1.875	47.6	10	283
PHH812	13/16	—	—	—	—	1.368	34.74	2.000	50.8	10	283
PHH875	7/8	—	—	1/2 H	5/8	1.447	36.75	2.000	50.8	10	283
PHH937	15/16	—	—	5/8	5/8	1.587	38.70	2.000	50.8	10 1/2	298
PHH1000	1	—	—	11/16	5/8	1.604	40.74	2.125	54.0	12	340
PHH1062	1 1/16	—	—	5/8 H	3/4	1.683	42.75	2.125	54.0	13	368
PHH1125	1 1/8	—	—	3/4 N	3/4	1.762	44.76	2.125	54.0	14 1/2	411
PHH1187	1 1/4	—	—	—	—	1.840	46.74	2.125	54.0	1 1	482
PHH1250	1 1/2	—	—	3/4 H	7/8	1.919	48.74	2.125	54.0	1 4	567
PHH1312	1 5/8	—	—	7/8 N	—	1.999	50.77	2.250	57.1	1 5	596
PHH1375	1 3/4	—	—	—	—	2.073	52.65	2.250	57.1	1 7	652
PHH1437	1 7/8	—	—	7/8 H	1	2.153	54.68	2.500	63.5	1 6	709
DEEP SOCKETS											
PHHD1100	1.100	5/8	11/16	—	—	1.750	44.45	3.750	95.2	1 10	737
PHHD1200	1.200	11/16	1 1/8	—	—	1.875	47.62	3.750	95.2	1 14	851
PHHD1300	1.300	3/4	1 1/4	—	—	2.000	50.80	3.750	95.2	2 1	935
PHHD1480	1.480	7/8	1	—	—	2.250	57.15	3.750	95.2	2 11	1219
PHHD1062	1 1/16	—	—	5/8 H	3/4	1.687	42.86	3.750	95.2	1 8	681
PHHD1125	1 1/8	—	—	3/4 N	3/4	1.750	44.45	3.750	95.2	1 9	709
PHHD1250	1 1/4	—	—	3/4 H	7/8	2.000	50.80	3.750	95.2	2 2	964
PHHD1312	1 5/8	—	—	7/8 N	—	2.062	52.39	3.750	95.2	2 4	1020

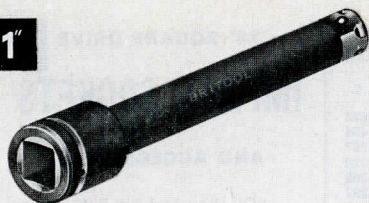
METRIC SIZES—HEXAGON

No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	lb. oz.	g.
PHHM18	18	1.239	31.47	1.750	44.4	8 1/2	241
PHHM19	19	1.288	32.71	1.875	47.6	8 1/2	241
PHHM20	20	1.340	34.04	2.000	50.8	8 1/2	241
PHHM22	22	1.439	36.55	2.000	50.8	9	255
PHHM23	23	1.486	37.74	2.000	50.8	9 1/2	269
PHHM24	24	1.541	39.14	2.000	50.8	10	283
PHHM26	26	1.637	41.58	2.125	54.0	11 1/2	326
PHHM27	27	1.687	42.86	2.125	54.0	12	340
PHHM29	29	1.784	45.31	2.125	54.0	14	397
PHHM30	30	1.833	46.56	2.125	54.0	14	397
PHHM32	32	1.930	49.02	2.125	54.0	1 3	539
PHHM35	35	2.077	52.76	2.250	57.1	1 7	652
PHHM36	36	2.128	54.05	2.500	63.5	1 9	709
PHHM38	38	2.225	56.52	2.500	63.5	1 12	794

Made from Chrome Alloy Steel.
Black rustproof finish.



1"



1" SQUARE DRIVE

IMPACT SOCKETS

AND ACCESSORIES

"O" Ring and Pin Fitting

"O" RINGS AND PINS TO ORDER.

BRITISH, UNIFIED AND AMERICAN SIZES—HEXAGON

No	A Nominal Size Across Flats in.	EQUIVALENT STANDARD NUT SIZE				D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		Whit.	B.S.	Unified	S.A.E.	in.	mm.	in.	mm.	lb. oz.	g.
PGH820	.820	3/16	1/2	—	—	1.459	37.06	2.500	63.5	1 6	624
PGH920	.920	1/2	5/16	—	—	1.585	40.26	2.500	63.5	1 7	652
PGH1010	1.010	5/8	3/4	—	—	1.697	43.10	2.500	63.5	1 7	652
PGH1100	1.100	5/8	13/16	—	—	1.809	45.95	2.500	63.5	1 10	737
PGH1200	1.200	1 1/16	3/4	—	—	1.935	49.15	2.625	66.7	1 13	822
PGH1300	1.300	3/4	7/8	—	—	2.061	52.35	2.625	66.7	1 10	737
PGH1390	1.390	13/16	15/16	—	—	2.172	55.17	2.625	66.7	1 9	709
PGH1480	1.480	7/8	1	—	—	2.287	58.09	2.625	66.7	2 0	907
PGH1670	1.670	1	1 1/8	—	—	2.522	64.06	2.625	66.7	2 1	935
PGH1860	1.860	1 1/8	1 1/4	—	—	2.762	70.15	2.750	69.8	2 15	1332
PGH2050	2.050	1 1/4	1 3/8	—	—	2.993	76.02	2.875	73.0	3 10	1644
PGH2220	2.220	1 3/8	1 1/2	—	—	3.212	81.59	3.062	77.8	4 2	1871
PGH2410	2.410	1 1/2	1 5/8	—	—	3.450	87.63	3.187	81.0	5 2	2325
PGH3150	3.150	2	2 1/4	—	—	4.378	111.20	3.750	95.2	7 3	3260
PGH750	3/4	—	—	1/2N	1/2	1.376	34.95	2.375	60.3	1 6	624
PGH812	13/16	—	—	—	—	1.448	36.77	2.375	60.3	1 6	624
PGH875	7/8	—	—	1/2H	3/4	1.527	38.78	2.375	60.3	1 3	539
PGH937	15/16	—	—	5/8N	5/8	1.607	40.82	2.500	63.5	1 7	652
PGH1000	1	—	—	—	1 1/16	1.684	42.77	2.500	63.5	1 8	681
PGH1062	1 1/16	—	—	5/8H	3/4	1.763	44.78	2.500	63.5	1 7	652
PGH1125	1 1/8	—	—	3/4N	—	1.842	46.79	2.500	63.5	1 9	709
PGH1187	1 3/16	—	—	—	—	1.920	48.77	2.625	66.7	1 12	794
PGH1250	1 1/4	—	—	3/4H	7/8	1.999	50.80	2.625	66.7	1 12	794
PGH1312	1 3/8	—	—	7/8N	—	2.079	52.81	2.625	66.7	1 11	766
PGH1375	1 3/8	—	—	—	—	2.153	54.68	2.625	66.7	1 9	709
PGH1437	1 7/8	—	—	7/8H	1N	2.231	56.74	2.625	66.7	1 14	851
PGH1500	1 1/2	—	—	1N	—	2.312	58.72	2.625	66.7	1 15	879
PGH1562	1 5/8	—	—	—	—	2.387	60.63	2.625	66.7	2 0	907
PGH1625	1 5/8	—	—	1H	1 1/8	2.469	62.71	2.625	66.7	2 2	964
PGH1687	1 11/16	—	—	1 1/8N	—	2.545	64.64	2.625	66.7	2 1	935
PGH1750	1 3/4	—	—	—	—	2.623	66.62	2.750	69.8	2 12	1247
PGH1812	1 13/16	—	—	1 1/4H	1 1/4	2.703	68.65	2.750	69.8	3 0	1361
PGH1875	1 7/8	—	—	1 1/4N	—	2.782	70.66	2.750	69.8	3 0	1361
PGH1937	1 15/16	—	—	—	—	2.857	72.57	2.750	69.8	3 2	1418
PGH2000	2	—	—	1 1/4H	1 3/8	2.936	74.60	2.875	73.0	3 12	1701
PGH2187	2 3/16	—	—	1 3/4H	1 1/2	3.172	80.57	3.000	76.2	4 3	1899
PGH2250	2 1/4	—	—	1 1/2N	—	3.250	82.55	3.062	77.8	4 2	1871
PGH2312	2 3/8	—	—	—	—	3.385	84.48	3.062	77.8	4 4	1927
PGH2375	2 3/8	—	—	1 1/2H	—	3.406	86.51	3.187	81.0	4 12	2154
PGH2500	2 1/2	—	—	—	—	3.562	90.47	3.187	81.0	4 14	2211
PGH2625	2 5/8	—	—	1 3/4N	—	3.719	94.46	3.312	84.1	5 4	2381
PGH2750	2 3/4	—	—	1 3/4H	—	3.875	98.42	3.437	87.3	5 10	2551
PGH2937	2 15/16	—	—	—	—	4.108	104.34	3.562	90.5	6 3	2807
PGH3125	3 3/8	—	—	2H	—	4.341	110.26	3.750	95.2	7 4	3288
DEEP SOCKETS											
PGHD1100	1-100	5/8	1 1/16	—	—	1.812	46.04	3.000	76.2	1 9	709
PGHD1200	1-200	3/4	1 1/8	—	—	2.000	50.80	3.250	82.5	2 0	907
PGHD1300	1-300	7/8	1 3/8	—	—	2.125	53.97	3.250	82.5	2 2	964
PGHD1480	1-480	1 1/8	1 7/8	—	—	2.312	58.74	3.500	88.9	2 12	1247
PGHD937	15/16	—	—	5/8N	5/8	1.594	40.48	3.000	76.2	1 7	652
PGHD1125	1 1/8	—	—	3/4N	—	1.812	46.04	3.000	76.2	1 8	681
PGHD1312	1 3/8	—	—	7/8N	—	2.062	52.39	3.250	82.5	2 2	964
PGHD1500	1 1/2	—	—	1N	—	2.312	58.74	3.500	88.9	2 12	1247

Made from Chrome Alloy Steel. Black rustproof finish.

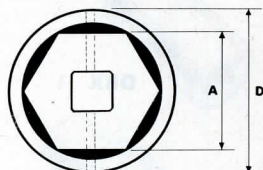
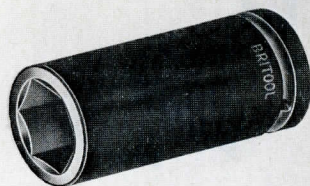


1" SQUARE DRIVE

IMPACT SOCKETS

METRIC SIZES—HEXAGON

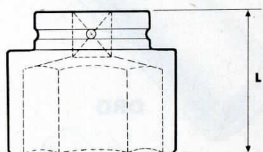
No.	A Nominal Size Across Flats mm.	D Maximum Outside Diameter Socket End		L Nominal Overall Length		Weight Each	
		in.	mm.	in.	mm.	lb. oz.	g.
PGHM36	36	2-208	56,08	2-625	66,7	1 14	851
PGHM41	41	2-455	62,36	2-625	66,7	2 2	964
PGHM46	46	2-702	68,63	2-750	69,8	3 0	1361
PGHM50	50	2-897	73,58	2-875	73,0	3 7	1559
PGHM55	55	3-141	79,78	3-000	76,2	4 0	1814
PGHM60	60	3-391	86,13	3-187	81,0	4 9	2069



ACCESSORIES

No.	Description	Weight Each	
		lb. oz.	g.
PG91	Universal Joint. Two piece Impact type	2 6	1077
PG97	Extension, 7" overall (178 mm.)	2 12	1247
PG65	Extension, 10" overall (254 mm.)	4 2	1871
*P/FPGS	Converter, 5/8" Sq. Plug x 1" Sq. Socket	1 4	567
*P/HPGS	Converter, 3/4" Sq. Plug x 1" Sq. Socket	1 3	539

* Not guaranteed.



SOCKET DRIVERS

1/4", 7/16" & 5/8" HEXAGON DRIVE

No.	Across Flats Drive End (Hexagon) in.	Across Flats Socket End (Square) in.	Overall Length		Weight Each	
			in.	mm.	lb. oz.	g.
P8-92-D	1/4	1/4	2	51	1	28
P8-92-A	1/4	3/8	2	51	1	28
P14-96-A	7/16	3/8	2 3/4	70	2 1/2	71
P14-97-A	7/16	3/8	5	127	5	142
P14-96-E	7/16	1/2	7	178	3	85
P14-98-E	7/16	1/2	12	305	1 4	567
P20-97-E	5/8	1/2	5	127	8	227



Made from Chrome Alloy Steel.
Black rustproof finish.

SCREW DRIVERS

FOR USE WITH RECESSED HEAD SCREWS

1/4" & 7/16" HEXAGON DRIVE

No.	Across Flats Drive End (Hexagon) in.	Across Flats Screw End (Hexagon) in.	Overall Length		Weight Each	
			in.	mm.	oz.	g.
P8-92-093	1/4	3/32	2	51	1/2	14
P8-92-125	1/4	1/8	2	51	1/2	14
P8-92-156	1/4	5/32	2	51	1/2	14
P8-92-187	1/4	3/16	2	51	1/2	14
P14-96-156	7/16	5/32	2 1/2	63	1	28
P14-96-187	7/16	3/16	2 1/2	63	1	28
P14-96-219	7/16	1/2	2 1/2	63	1 1/2	42
P14-96-250	7/16	1/4	2 1/2	63	1 1/2	42
P14-96-312	7/16	5/8	2 1/2	63	1 1/2	42
P14-96-375	7/16	3/8	2 1/2	63	1 1/2	42



Made from Chrome Alloy Steel.
Black rustproof finish.



REFRIGERATION TOOLS

Made from Chrome Alloy Steel.

Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.



DPH



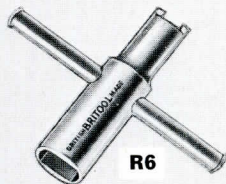
DRX



DRO



DRG



R6



R1

HEXAGON PLUGS FOR RECESSED HEAD SCREWS

No.	Hexagon Size Across Flats in.	Length of Hexagon		Overall Length		Weight per 10	
		in.	mm.	in.	mm.	oz.	g.
DPH3	3/32	1/4	6,3	11/16	17,5	2 1/2	71
DPH4	1/8	1/4	6,3	11/16	17,5	3	85
DPH5	5/32	1/4	6,3	11/16	17,5	3	85
DPH6	3/16	1/4	6,3	11/16	17,5	3	85

The above plugs have a black rust proof finish.

SQUARE VALVE STEM SOCKETS

No.	Square Socket Size in.	Diameter Drive End		Overall Length		Weight per 10	
		in.	mm.	in.	mm.	oz.	g.
DRX187	3/16	1/2	12,7	1 1/4	31,7	8	227
DRX219	1/2	1/2	12,7	1 1/4	31,7	7	198
DRX250	3/4	1/2	12,7	1 1/4	31,7	7	198
DRX312	5/8	3/4	19,0	1 1/4	31,7	10	283
DRX375	3/4	1 1/16	17,5	1 1/4	31,7	12	340

OVAL GLAND NUT SOCKETS

No.	Oval Length		Oval Width		Socket Outside Dia.		Overall Length		Weight per 10	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	lb. oz.	g.
DRO1	1 1/2	12,7	3/8	9,5	5/8	15,9	1 7/8	47,6	15	425
DRO2	1 1/4	17,5	3/8	9,5	13/16	20,6	1 7/8	47,6	1 7	652
DRO3	1 1/8	22,2	15/16	23,8	1 1/16	27,0	1 7/8	47,6	1 15	869

PACKING (SLOTTED) GLAND NUT SOCKETS

No.	Prong Width		Prong Depth		Prong Diameter				Overall Length		Weight per 10	
					Inside		Outside					
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	lb. oz.	g.
DRG1	3/4	2,0	3/32	2,4	5/16	8,0	7/16	11,1	2	50,8	9	255
DRG2	1/2	3,2	3/32	2,4	2/4	8,3	15/32	11,9	2	50,8	10	283
DRG3	1/4	3,2	1/8	3,2	2/4	11,5	11/16	17,5	2	50,8	1 4	567
DRG4	3/4	2,0	3/32	2,4	5/16	14,3	3/16	20,6	2	50,8	1 10	737
DRG5	3/4	2,8	3/32	2,4	5/16	8,0	3/16	14,3	2	50,8	15	425

COMBINATION GLAND NUT SOCKETS

Double Ended

No. R6 Combination of DRG2 and DRO1

Overall length 2" (51 mm.). Sliding Bar Handle 2 3/4" (70 mm.).

Weight 2 oz. each.
57 g.

SQUARE VALVE STEM SOCKETS

Double Ended

No. R1 3/16" x 1/4" Square.

Overall length 2" (51 mm.). Sliding Bar Handle 2 3/4" (70 mm.).

Weight 2 oz. each.
57 g.

1/4" & 3/8" SQUARE DRIVE

REFRIGERATION TOOLS

Made from Chrome Alloy Steel.

Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

NORMAL DUTY RATCHET WRENCH No. D71

This is a low priced tool for production or assembly line use.

The ratchet drive is 1/4" square (female).

The handle carries 3/16" and 5/16" square and 1/2" bihexagon openings.

To reverse, turn the ratchet over.

Length 6 1/4" (159 mm.)

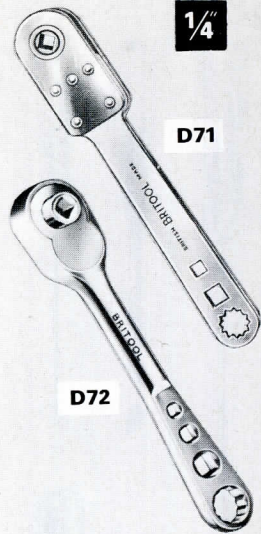
Weight 5 1/2 oz. each.
156 g.

MASTER RATCHET WRENCH No. D72/20T

This ratchet is of superior construction with top reverse lever action. Additional fixed sizes of 3/16", 1/4" and 5/16" square also 1/2" bihexagon are in the handle. Female drive.

Length 6 1/4" (159 mm.)

Weight 7 oz. each.
198 g.



REFRIGERATION SERVICE SOCKET SET

Contains a full range of specialised sockets together with standard sockets and essential accessories.

Housed in steel case, red hammer finish.

Size 8 3/4" x 3 1/4" x 1" (222 x 82 x 25 mm.)

SET No. 151 24 pieces.

Tool No.	Description
D72	1/4" Square Drive Ratchet.
D93	Flexible Extension.
D97	6" Extension.
DRX187	3/16" Square Valve Stem Socket.
DRX219	7/32" Square Valve Stem Socket.
DRX250	1/4" Square Valve Stem Socket.
DRX312	5/16" Square Valve Stem Socket.
DRX375	3/8" Square Valve Stem Socket.
DRG1	7/16" o/d Packing Gland Nut Socket.
DRG2	15/32" o/d Packing Gland Nut Socket.
DRG3	1 1/16" o/d Packing Gland Nut Socket.
DRG4	1 3/16" o/d Packing Gland Nut Socket.
DRG5	7/8" o/d Packing Gland Nut Socket.
DRO1	1/2" Oval Packing Gland Nut Socket.
DPAP	1/2" Square Drive Plug x 3/8" Square Drive Plug Converter.
AB525	3/8" Square Drive Socket 1/4" Whitworth.
AB600	3/8" Square Drive Socket 5/16" Whitworth.
AB710	3/8" Square Drive Socket 3/8" Whitworth.
AB437	3/8" Square Drive Socket 7/16" Across Flats.
AB500	3/8" Square Drive Socket 1/2" Across Flats.
AB562	3/8" Square Drive Socket 9/16" Across Flats.
DPH4	1/4" Hexagon Plug for Recessed Head Screws.
DPH5	3/32" Hexagon Plug for Recessed Head Screws.
DPH6	7/16" Hexagon Plug for Recessed Head Screws.

Weight 3 lb. 4 oz. per set.
1474 g.



SCREWDRIVERS

Transparent amber colour, shockproof handles.
Forged and ground ends correctly heat treated.
Made from Chrome Alloy Steel. Nickel plated blades.

ENGINEERS—ROUND BLADE

No.	Blade Size		Handle Size		Boxed Quantity	Weight Boxed	
	in.	mm.	in.	mm.		lb. oz.	g.
417/4	4 × 1/4	102 × 6,35	3 × 1	76 × 25,40	10	1 11	766
417/6	6 × 5/16	152 × 7,94	4 × 1	102 × 25,40	10	2 14	1304
417/8	8 × 3/8	203 × 9,52	4 1/4 × 1	108 × 25,40	5	2 10	1190
417/10	10 × 3/8	254 × 9,52	4 1/2 × 1 1/4	114 × 31,75	5	3 0	1361
417/12	12 × 3/8	305 × 9,52	5 × 1 1/4	127 × 31,75	5	3 6	1531

ENGINEERS—SQUARE BLADE

No.	Blade Size		Handle Size		Boxed Quantity	Weight Boxed	
	in.	mm.	in.	mm.		lb. oz.	g.
422/6	6 × 5/16	152 × 7,94	4 × 1	102 × 25,40	5	1 12	794
422/8	8 × 3/8	203 × 9,52	4 1/2 × 1 1/4	108 × 25,40	5	2 10	1190
422/12	12 × 3/8	305 × 9,52	4 1/2 × 1 1/4	114 × 31,75	5	4 0	1814

ELECTRICIANS

No.	Blade Size		Handle Size		Boxed Quantity	Weight Boxed	
	in.	mm.	in.	mm.		lb. oz.	g.
415/4	4 × 3/16	102 × 4,76	2 1/2 × 3/4	63 × 19,05	10	15	425
415/6	6 × 3/16	152 × 4,76	3 × 3/4	76 × 19,05	10	1 3	539
415/8	8 × 3/16	203 × 4,76	3 1/2 × 3/4	89 × 19,05	10	1 7	652

CHUBBY

No.	Blade Size		Handle Size		Boxed Quantity	Weight Boxed	
	in.	mm.	in.	mm.		oz.	g.
419	1 1/2 × 1/4	38 × 6,35	2 × 1 1/4	51 × 31,75	5	13	368

POCKET

No.	Blade Size		Handle Size		Boxed Quantity	Weight Boxed	
	in.	mm.	in.	mm.		oz.	g.
421	2 1/2 × 1/8	63 × 3,17	2 × 1/2	51 × 12,70	10	6	170

SCREWDRIVERS-PHILLIPS AND POZIDRIV

No.		Point Size	Screw Sizes	Blade Length		Handle Size		Boxed Quantity	Weight Boxed	
Phillips	Pozidriv			in.	mm.	in.	mm.		lb. oz.	g.
423/P1	425/1	1	No. 4 and smaller	3	76	2 1/2 × 3/4	63 × 19,05	10	14	397
423/P2	425/2	2	Nos. 5 to 10 incl.	4	102	3 1/2 × 1	89 × 25,40	10	1 15	879
423/P3	425/3	3	Nos. 12 to 16 incl.	6	152	4 × 1	102 × 25,40	5	1 9	709
423/P4	425/4	4	No. 18 and larger	8	203	4 1/2 × 1 1/4	114 × 31,75	5	2 14	1304

CHUBBY

No.		Point Size	Screw Sizes	Blade Length		Handle Size		Boxed Quantity	Weight Boxed	
Phillips	Pozidriv			in.	mm.	in.	mm.		oz.	g.
424/P1	426/1	1	No. 4 and smaller	1	25	2 × 1 1/4	51 × 31,75	5	10	283
424/P2	426/2	2	Nos. 5 to 10 incl.	1 1/2	38	2 × 1 1/4	51 × 31,75	5	12	340

Made from Chrome Alloy Steel. Nickel plated blades.

Shockproof handles—amber (Phillips)
red (Pozidriv)

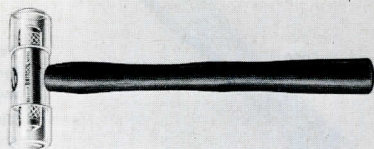


PLASTIC HEAD MALLETS

Ideal for all jobs where a metal hammer would cause damage.

Transparent amber colour heads.

Varnished wooden handles.



No.	Diameter of Ends		Overall Length of Head		Overall Length of Handle		Weight Each	
	in.	mm.	in.	mm.	in.	mm.	oz.	g.
683/8	1	25.40	3 1/2	89	10 1/2	267	8	227
683/12	1 1/4	31.75	4	102	10 3/4	273	12	340

SPARE ENDS

No.	Weight per 10	
	oz.	g.
683/8H	6	170
683/12H	12	340

FEELER GAUGE SET

10 BLADES—1 1/2, 2, 3, 4, 6, 8, 10, 12, 15, 25
1000ths OF AN INCH

This set of feeler gauges is ideal for automobile engineers, general mechanics and the private motorist.

Each blade is clearly marked with its size and is 1/2" wide with a symmetrical taper over 2 1/4" terminating in a 3/16" half-round tip.

The blades are secured inside a strong metal cover strip by means of a large hollow rivet ensuring a smooth, positive hinge. A thumb-hole is provided to ease blade accessibility.

Supplied in quantities of TEN, complete in 'tear-off' display pack 12 1/2" x 5 1/4" (318 x 133 mm.). Made from red and clear P.V.C. and perforated to enable each set to be sold in its own individual wallet. An eyelet is provided for hanging and a printed header card gives all essential information.

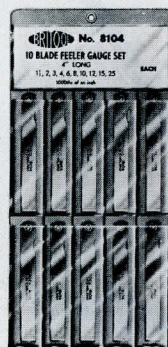
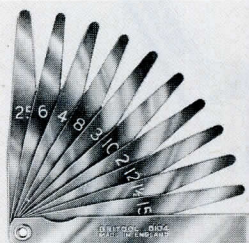
The complete pack is itself supplied in an attractive three colour carton, size 5 5/8" x 4 3/4" x 3/4" (143 x 121 x 19 mm.).

ORDERS ARE ONLY ACCEPTED FOR TEN SETS (ONE PACK) OR MULTIPLES OF TEN SETS.

No. 8104 Overall dimensions: 4 1/4" x 1 1/2" x 3/16".
105 x 13 x 5 mm.

10 Sets in P.V.C. Display Pack

Weight 14 oz. complete.
397 g.



UNIVERSAL PLIERS

These universal slip-joint pliers are both light and robust and the jaw shape enables them to be used on a large variety of servicing and assembly jobs. The pivot pin has six positions and is self-locking. Made from High Tensile Steel. Bright plated finish.

No. 578

Maximum jaw opening 1 3/4" (44 mm.)

Overall length 9 1/2" (241 mm.)

Weight 8 oz. each.
227 g.



STRAP WRENCH

This wrench has innumerable uses and will be found invaluable for removing round or irregular shaped units, including hot radiator caps, hub caps, etc.

The strap is made from plaited strand oil impregnated nylon and does not damage polished parts.

The handle is made from malleable iron and has a red enamel finish.

No. 3000 Overall length $7\frac{1}{2}$ " (130 mm.). Length of Strap 24" (610 mm.).

Weight 9 oz. each.
255 g.



"C" HOOK WRENCHES

These are invaluable in all industries where lock or adjustment rings have to be turned. The wrench adjustment provided in relation to its size ensures maximum efficiency and obviates the need for separate wrenches.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

No.	Capacity for Circles Diameter		Overall Length		Weight Each	
	in.	mm.	in.	mm.	oz.	g.
3150	$\frac{3}{4}$ -2	19-51	$6\frac{1}{2}$	165	4	113
3151	$1\frac{1}{4}$ -3	32-76	$8\frac{1}{2}$	216	$8\frac{1}{2}$	241
3152	2-4 $\frac{1}{4}$	51-121	$10\frac{1}{2}$	267	15 $\frac{1}{2}$	439

No. 2416 Set of 3 in Roll.

Weight 2 lb. per set.
907 g.



PRY BAR

This is a tool with a thousand and one uses and will prove an invaluable addition to the equipment of a Service Station, Garage or Workshop.

Made from Chrome Alloy Steel.

Red painted finish. Supplied in pairs.

No. 219 Shank diameter $\frac{3}{16}$ " (14.3 mm.). Overall length $16\frac{1}{4}$ " (413 mm.).

Weight 2 lb. per pair.
907 g.

HUB EXTRACTOR AUTOMOBILE AND LIGHT TRUCK

This extractor is supplied complete with 3, 4 or 5 legs and has a maximum capacity of $7\frac{1}{2}$ " (190 mm.) pitch circle.

The heat treated pressure screw operates in a sliding bearing thus safeguarding the thread from damage due to impact blows.

The legs and screw are made from Chrome Alloy Steel. Finished in bright nickel and chrome plate to B.S. 1224: 1970, service condition No. 1.

Black rustproof screw.

Spare legs available.

No. 875/3L—complete with three legs.

Weight 12 lb. each.
5444 g.

No. 875/4L—complete with four legs.

Weight 13 lb. 8 oz. each
6124 g.

No. 875/5L—complete with five legs.

Weight 15 lb. each.
6804 g.

3000

3150-52

219

WRENCHES - VARIOUS

CYLINDER HEAD NUT WRENCHES

These specialised wrenches have been developed in close collaboration with automobile engine manufacturers and are in most cases absolutely indispensable.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

BRITTOOL TORQUE WRENCHES should always be used where torque operation is called for.

No. 195

Fits all Bedford Truck Petrol Engines 1951 onwards with $\frac{3}{4}$ " A/F nuts, also

Austin Trucks—Series 301 Diesel, LCFO, 3-ton (Series 3) Diesel, 4-ton Diesel, 5-ton (Series 3) Prime Mover and Coach Diesel, 7-ton. Morris Trucks—LCO.5, LCO.5T, LCFO, NVO.3, 3-ton (Series III) Diesel, 4-ton Diesel, 5-ton (Series III) Diesel, 7-ton. Nuffield Tractors—Models DM (OEA/2), 3 DL (OEC/2).

Size: $\frac{3}{4}$ " A/F Bihexagon $\times$ $\frac{1}{2}$ " Square Drive. Weight 7 oz. each. 198 g.

No. 204

Fits all Vauxhall Victor Models 1957, onwards, Velox and Cresta Models 1958 onwards, Bedford CA Van 1957 onwards.

Size: $\frac{1}{16}$ " A/F Bihexagon $\times$ $\frac{1}{2}$ " Square Drive. Weight 5 oz. each. 142 g.

FUEL INJECTION PIPE NUT WRENCHES

Specially designed to service the high pressure delivery pipe nuts on diesel engine fuel injection pumps.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

No. 220 Size: $\frac{5}{16}$ " $\times$ $\frac{3}{4}$ " Across Flats.

No. 221 Size: $\frac{3}{8}$ " $\times$ $\frac{1}{16}$ " Whit. ($\frac{3}{16}$ " $\times$ $\frac{1}{2}$ " B.S.).

Overall length $8\frac{1}{4}$ " (210 mm.).

Weight 8 oz. each 227 g.

Gap size: $\frac{3}{16}$ " (9.5 mm.) each end.

Nut Size	Hexagon Size	Pumps Covered
A and New B	$\frac{3}{16}$ " Whit. $\frac{1}{16}$ " B.S.	C.A.V.—A, AA, B, N SIMMS—A, B, M
Old B	$\frac{3}{16}$ " Whit. $\frac{1}{2}$ " B.S.	C.A.V.—AA, B, N INTERNATIONAL HARVESTER
—	$\frac{5}{16}$ " A/F	D.P.A.—return union
—	$\frac{3}{4}$ " A/F	D.P.A.—inlet union and auto advance housing screw

SPLINED SOCKETS FOR DIESEL PUMP DELIVERY VALVE HOLDERS

Special sockets, $\frac{1}{2}$ " square drive, with serrations to suit valve holders. Drilled for bar handle.

Made from Chrome Alloy Steel. Bright nickel and chrome plated finish to B.S. 1224: 1970, service condition No. 1.

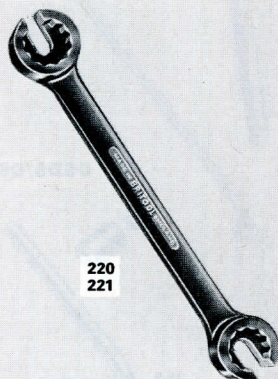
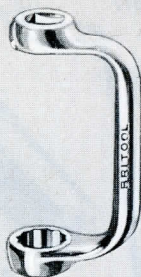
No. 225 $\frac{3}{4}$ " diameter serrations.
Outside diameter 1-102" (28 mm.)
Overall length 2-677" (68 mm.)

Weight 6 oz. each.
170 g.

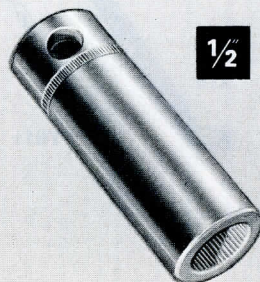
No. 226 1" diameter serrations.
Outside diameter 1-181" (30 mm.)
Overall length 2-677" (68 mm.)

Weight 8 oz. each.
227 g.

$\frac{1}{2}$ "



$\frac{1}{2}$ "



WRENCHES - VARIOUS

REAR 'U' BOLT NUT WRENCHES

No. 1077 Single Ended Bi-hexagon Ring Wrench.

Size: $\frac{15}{16}$ " Across Flats. Overall length $21\frac{1}{2}$ " (546 mm.).

Weight 2 lb. 2 oz. each.
964 g.

No. HD937 $\frac{3}{4}$ " Square Drive Deep Bi-hexagon Socket.

Size: $\frac{15}{16}$ " Across Flats. Overall length $3\frac{1}{2}$ " (89 mm.).

Weight 14 oz. each.
397 g.

No. PGHD937 1" Square Drive Deep Hexagon Socket.

Size: $\frac{15}{16}$ " Across Flats. Overall length 3" (76 mm.)

Black rustproof finish.

Weight 1 lb. 7 oz. each.
652 g.

The above are suitable for use on Bedford K. M. O. S. and TA Trucks.

No. PEHD625 $\frac{1}{2}$ " Square Drive Deep Hexagon Socket.

Size: $\frac{5}{8}$ " Across Flats. Overall length $2\frac{1}{2}$ " (63 mm.).

Black rustproof finish.

Weight $5\frac{1}{4}$ oz. each.
156 g.

Suitable for Vauxhall H, I, J, L and E models.

For details of further deep sockets suitable for this application refer to $\frac{3}{4}$ " and 1" square drive deep impact sockets on pages 67 and 68.

BRAKE BLEEDING WRENCH

This double-ended hexagon ring wrench is made extra long and slim for easy operation.

No. 217 Size: $\frac{1}{4}$ " $\times$ $\frac{3}{8}$ " Across Flats.

Weight 2 oz. each.
57 g.

Overall length $9\frac{1}{2}$ " (241 mm.).

BRAKE ADJUSTING WRENCHES

No. DSDS/D61

Weight 3 oz. each.
85 g.

Combination of convertor with $\frac{1}{4}$ " square drive socket at each end and D61 $\frac{1}{4}$ " square offset handle.

No. 212 Single Ended Ring Wrench

Size: $\frac{3}{8}$ " Across Flats Bisquare. Overall length $5\frac{3}{8}$ " (136 mm.).

Weight $3\frac{1}{2}$ oz. each.
99 g.

No. 216

Double-ended swivel type wrench with friction held sockets which can move through 180° , so enabling the shank to be positioned at the most convenient angle for operation.

Size: $\frac{1}{4}$ " $\times$ $\frac{5}{16}$ " Across Flats Square.

Maximum overall length $7\frac{5}{8}$ " (193 mm.).

Weight 4 oz. each.
113 g.

No. 222

Similar to No. 216

Size: $\frac{1}{32}$ " $\times$ $\frac{3}{8}$ " Across Flats Square.
Maximum overall length $7\frac{7}{8}$ " (200 mm.)

Weight 6 oz. each.
170 g.

No. FTB11 Single Ended Ring Wrench

Size: $\frac{1}{4}$ " Across Flats Square. Overall length $5\frac{5}{8}$ " (143 mm.).

Weight 2 oz. each.
57 g.

The wrenches listed above cover the adjusting screw sizes most frequently used on British Vehicles

Variations in design within a range of vehicles can influence accessibility and in cases where clearance is severely restricted, use of the appropriate wrench from the RJQ Series listed on page 49 may well be the solution.

All items on this page are made from Chrome Alloy Steel and finished in bright nickel and chrome plate to B.S. 1224: 1970, service condition No. 1. except where stated.

1077

HD937

PEHD625

217

DSDS/D61

212

222
216

FTB11

ADJUSTABLE WRENCHES

Made from Swedish steel, fully heat-treated. Each wrench presented in a descriptive cardboard sleeve with slot for hanging and plain circle for pricing.

CHROME PLATED FINISH

No.	A Nominal Jaw Opening (Max.)		L Nominal Overall Length		Boxed Quantity	Weight Boxed	
	mm.	in.	in.	mm.		lb. oz.	g.
304C	13	-50	4	102	5	11	312
306C	19	-75	6	152	5	1 10	737
308C	26	1-00	8	203	5	2 11	1219
310C	30	1-20	10	254	5	3 12	1701
312C	34	1-35	12	305	5	6 14	3119

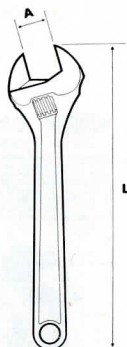
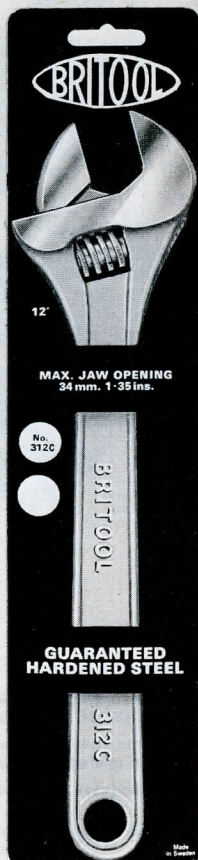
PHOSPHATED FINISH

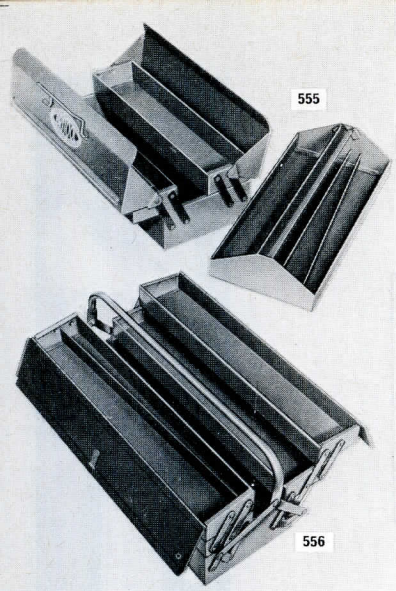
No.	A Nominal Jaw Opening (Max.)		L Nominal Overall Length		Boxed Quantity	Weight Boxed or Each	
	mm.	in.	in.	mm.		lb. oz.	g.
304	13	-50	4	102	5	11	312
306	19	-75	6	152	5	1 10	737
308	26	1-00	8	203	5	2 11	1219
310	30	1-20	10	254	5	3 12	1701
312	34	1-35	12	305	5	6 14	3119
315	42	1-65	15	381	—	2 1	935
318	52	2-10	18	457	—	3 6	1531

REPAIR KITS

Each kit contains replacement movable jaw, adjusting nut, spindle and spring. Contained in strong polythene bag.

Kit No.	For Wrench No.	Weight Each	
		oz.	g.
RK/304	304	1/2	14
RK/304C	304C	1/2	14
RK/306	306	1	28
RK/306C	306C	1	28
RK/308	308	1 1/2	42
RK/308C	308C	1 1/2	42
RK/310	310	2 1/2	71
RK/310C	310C	2 1/2	71
RK/312	312	4	113
RK/312C	312C	4	113
RK/315	315	6 1/2	184
RK/318	318	10	283





CANTILEVER TOOLBOXES

No. 555 Overall size: $18\frac{3}{4}" \times 8\frac{3}{8}" \times 9\frac{1}{4}"$ Weight **14 lb. each.**
(476. x 213 x 235 mm.) **6350 g.**

Made from 20 s.w.g. steel.

Of three tier construction with single full-width lower compartment, two half-width hinged compartments and removable tote-tray.

The carrying handles incorporate a locking device and will fold flat if required.

Red hammer finish with black hinge strips.

Supplied in special carton containing six individually cartoned toolboxes.

No. 556 Overall size: $23\frac{1}{2}" \times 8\frac{1}{4}" \times 8\frac{1}{2}"$ Weight: **15 lb. 8 oz.**
(597 x 210 x 216 mm.) each.
7031 g.

Made from 20 s.w.g. steel.

Of three tier construction with single full-width lower compartment and four half-width hinged compartments.

Lid flaps fitted with piano type hinges and locking device. Tubular carrying handle.

Red hammer finish.

Supplied in special carton containing four individually cartoned toolboxes.

RATCHET REPAIR KITS

These kits contain interchangeable replacement parts for the **BRITOL** ratchet wrenches specified.

Supplied in strong polythene bags $3" \times 5\frac{3}{4}"$ (76 x 146 mm.) with printed contents card.

Use complete kit. Do not mix old and new parts.

No. RK/D74 For use with ratchet wrench No. **D74**.
 $\frac{1}{4}"$ square drive.

Contents: 20 tooth Ratchet Wheel, Pawl, Ball, and Spring, Side Plate and Screws, Change Lever.

Weight $\frac{3}{4}$ oz. per set.
21 g.

No. RK/A45 For use with ratchet wrench No. **A45**.
 $\frac{3}{8}"$ square drive.

Contents: 28 tooth Ratchet Wheel, Pawl, Ball and Spring, Side Plate and Screws, Change Lever.

Weight 2 oz. per set.
57 g.

No. RK/A74 For use with ratchet wrenches **A74/20T** and **A74/40T**. $\frac{3}{8}"$ square drive.

Contents: 20 tooth Ratchet Wheel, Pawl, Ball and Spring, Side Plate and Screws, Change Lever.

Boxed quantity—5

Weight 12 oz. boxed.
340 g.

No. RK/E73 For use with ratchet wrench No. **E73**.
 $\frac{1}{2}"$ square drive.

Contents: 12 tooth Ratchet Wheel, Pawl, Ball and Spring, Side Plates (2) and Rivets (5).

Weight 4 oz. per set.
113 g.

No. RK/E74 For use with ratchet wrenches **E74/20T** and **E74/40T**.
 $\frac{1}{2}"$ square drive.

Contents: 40 tooth Ratchet Wheel, Pawl, Ball and Spring, Side Plate and Screws, Change Lever.

Boxed quantity—5

Weight 1 lb. 15 oz. boxed.
879 g.

No. RK/H73 For use with ratchet wrench No. **H73**.
 $\frac{3}{4}"$ square drive.

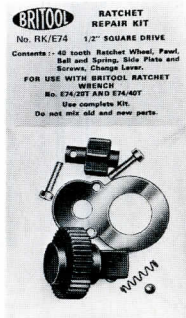
Contents: 16 tooth Ratchet Wheel, Pawl, Ball and Spring, Side Plates (2) and Rivets (5).

Weight 1 lb. 9 oz. per set.
709 g.

No. RK/H74 For use with ratchet wrench No. **H74**.
 $\frac{3}{4}"$ square drive.

Contents: 20 tooth Ratchet Wheel, Pawl, Ball and Spring, Side Plate and Screws, Change Lever.

Weight 8 oz. per set.
227 g.

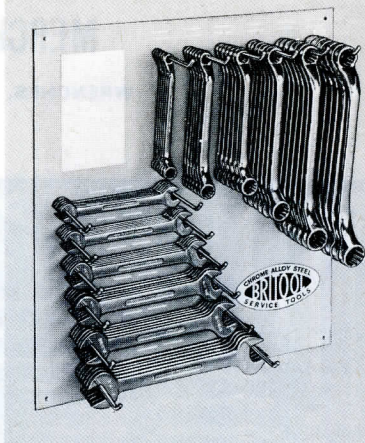


MERCHANDISER PANELS

RING, OPEN JAW AND COMBINATION WRENCHES

Made from $\frac{1}{4}$ " thick plain hardboard, bright red finish, with rigid bright plated hooks. All wrench sizes are clearly marked.

All panels are 16" wide $\times$ 18" deep (406 $\times$ 457 mm.) giving maximum scope for display when more than one merchandiser is involved. A folding back support is included for counter or shelf location and holes also provided for wall mounting.



No. 3010 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 60 wrenches, Whitworth sizes, as follows:—
30 Open Jaw Wrenches 2J Series.

5 each— $\frac{1}{8}$ " $\times$ $\frac{3}{16}$ ", $\frac{3}{16}$ " $\times$ $\frac{1}{4}$ ", $\frac{1}{4}$ " $\times$ $\frac{5}{16}$ ", $\frac{5}{16}$ " $\times$ $\frac{3}{8}$ ", $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ " Whitworth.

30 Bihexagon Ring Wrenches 2RB Series.

5 each— $\frac{1}{8}$ " $\times$ $\frac{3}{16}$ ", $\frac{3}{16}$ " $\times$ $\frac{1}{4}$ ", $\frac{1}{4}$ " $\times$ $\frac{5}{16}$ ", $\frac{5}{16}$ " $\times$ $\frac{3}{8}$ ", $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ " Whitworth.

Weight 23 lb. complete.
10433 g.

No. 3011 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 60 wrenches, American sizes, as follows:—
30 Open Jaw Wrenches 2J Series.

5 each— $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ ", $\frac{1}{2}$ " $\times$ $\frac{5}{8}$ ", $\frac{5}{8}$ " $\times$ $\frac{11}{16}$ ", $\frac{3}{4}$ " $\times$ $\frac{1}{2}$ " Across Flats.

30 Bihexagon Ring Wrenches 2RB Series.

5 each— $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ ", $\frac{1}{2}$ " $\times$ $\frac{5}{8}$ ", $\frac{5}{8}$ " $\times$ $\frac{11}{16}$ ", $\frac{3}{4}$ " $\times$ $\frac{1}{2}$ " Across Flats.

Weight 22 lb. complete.
9979 g.

No. 3012 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 60 wrenches, Metric sizes, as follows:—
30 Open Jaw Wrenches 2JM Series.

5 each—8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19 mm.

30 Bihexagon Ring Wrenches 9RBM Series.

5 each—8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19 mm.

Weight 20 lb. complete.
9072 g.

No. 3013 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 50 wrenches, Whitworth sizes, as follows:—
25 Open Jaw Wrenches 6J Series.

5 each— $\frac{1}{8}$ " $\times$ $\frac{3}{16}$ ", $\frac{3}{16}$ " $\times$ $\frac{1}{4}$ ", $\frac{1}{4}$ " $\times$ $\frac{5}{16}$ ", $\frac{5}{16}$ " $\times$ $\frac{3}{8}$ ", $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ " Whitworth.

25 Bihexagon Ring Wrenches 6RB Series.

5 each— $\frac{1}{8}$ " $\times$ $\frac{3}{16}$ ", $\frac{3}{16}$ " $\times$ $\frac{1}{4}$ ", $\frac{1}{4}$ " $\times$ $\frac{5}{16}$ ", $\frac{5}{16}$ " $\times$ $\frac{3}{8}$ ", $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ " Whitworth.

Weight 17 lb. complete.
7711 g.

No. 3014 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 50 wrenches, American sizes, as follows:—
25 Open Jaw Wrenches 6J Series.

5 each— $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ ", $\frac{1}{2}$ " $\times$ $\frac{5}{8}$ ", $\frac{5}{8}$ " $\times$ $\frac{11}{16}$ " Across Flats.

25 Bihexagon Ring Wrenches 6RB Series.

5 each— $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ ", $\frac{1}{2}$ " $\times$ $\frac{5}{8}$ ", $\frac{5}{8}$ " $\times$ $\frac{11}{16}$ " Across Flats.

Weight 15 lb. complete.
6804 g.

No. 3015 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 50 wrenches, Metric sizes, as follows:—
25 Open Jaw Wrenches 6JM Series.

5 each—8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17 mm.

25 Bihexagon Ring Wrenches 6RBM Series.

5 each—8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17 mm.

Weight 14 lb. complete.
6350 g.

No. 3016 Size: 16" $\times$ 18" (406 $\times$ 457 mm.). Contains 100 wrenches, American and Metric sizes as follows:—

50 Combination Wrenches, RJ Series.

5 each— $\frac{1}{4}$ " $\times$ $\frac{5}{16}$ ", $\frac{5}{16}$ " $\times$ $\frac{3}{8}$ ", $\frac{3}{8}$ " $\times$ $\frac{7}{16}$ ", $\frac{7}{16}$ " $\times$ $\frac{1}{2}$ ", $\frac{1}{2}$ " $\times$ $\frac{5}{8}$ ", $\frac{5}{8}$ " $\times$ $\frac{11}{16}$ ", $\frac{3}{4}$ " Across Flats.

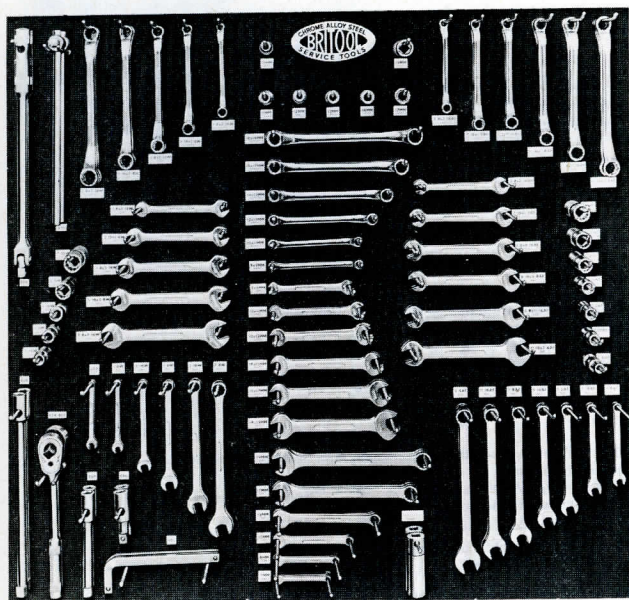
50 Combination Wrenches, RJM Series.

5 each—7, 8, 9, 10, 11, 12, 13, 14, 17, 19 mm.

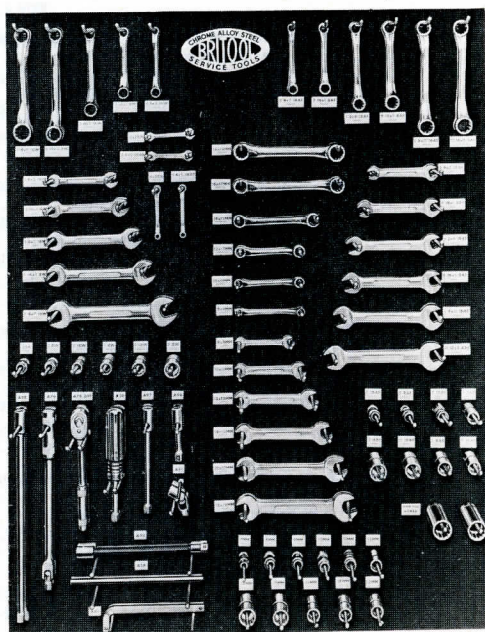
Weight 23 lb. complete.
10433 g.

MERCHANDISER PANELS

WRENCHES, SOCKETS AND ACCESSORIES



No. 3021
1/2" SQUARE DRIVE



No. 3022
3/8" SQUARE DRIVE

MERCHANDISER PANELS

No. 3021 AND 3022

Compact in area and specification, these intermediate panels have been specially created to serve the retail outlet. Only fast moving items are included and the selected ranges of sizes cover British, Unified, American and Metric standards.

Each panel contains a different pattern of wrench and size of square drive so enabling them to be combined for increased coverage without duplication of stock.

The panels are made from best quality 12 mm. plywood with red cellulose painted finish and the tools are located on rigid $\frac{3}{16}$ " dia. $\times$ $4\frac{1}{2}$ " bright plated hooks. Each tool is clearly identified with part number and/or size by means of an adjacent "label" silk-screened directly onto the panel. Clearance battens are included at the back and 4 holes provided for wall mounting.

Panel supplied free on loan with the assortment of tools detailed.

No. 3021 Panel size: $40\frac{1}{2}" \times 36"$ (1029 $\times$ 914 mm.) 213 pieces.

RING WRENCHES 3 Each

2RB SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$.

2RB SERIES Unified and American Sizes: $\frac{3}{16}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{1}{16}"$, $\frac{1}{16}" \times \frac{3}{4}"$
Across Flats.

9RBM SERIES Metric Sizes: 8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19 mm.

OPEN JAW WRENCHES 3 Each

2J SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$.

2J SERIES Unified and American Sizes: $\frac{3}{16}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{1}{16}"$, $\frac{1}{16}" \times \frac{3}{4}"$
Across Flats.

2JM SERIES Metric Sizes: 8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19 mm.

COMBINATION WRENCHES 3 Each

RJ SERIES Whitworth Sizes: $\frac{1}{8}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$.

B.A. Size: 2BA.

RJ SERIES Unified and American Sizes: $\frac{3}{16}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{1}{16}"$, $\frac{3}{4}"$ Across Flats.

RJM SERIES Metric Sizes: 7-8-10-13-17-19 mm.

SOCKET WRENCHES 2 Each

EB SERIES Whitworth Sizes: $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$.

EB SERIES Unified and American Sizes: $\frac{3}{16}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{1}{16}"$, $\frac{3}{4}"$ Across Flats.

EBM SERIES Metric Sizes: 10-11-12-13-14-17-19 mm.

14 mm. Spark Plug Socket (EDH812).

SOCKET ACCESSORIES 2 Each

$\frac{1}{2}"$ Square Drive—"L" Handle, Sliding Offset Handle, Ratchet Handle, Swivel Handle (15"), 3", 6" and 12" Extensions.

Weight 75 lb. complete.

33020 g.

No. 3022 Panel size: $30" \times 36"$ (762 $\times$ 914 mm.) 186 pieces.

RING WRENCHES 3 Each

6RB SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$.

6RB SERIES Unified and American Sizes: $\frac{3}{16}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{1}{16}"$, $\frac{1}{16}" \times \frac{3}{4}"$
Across Flats.

6RBM SERIES Metric Sizes: 8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19 mm.

RH SERIES B.A. Sizes: 4 $\times$ 2.

RH SERIES Unified and American Sizes: $\frac{1}{4}" \times \frac{5}{16}"$ Across Flats.

OPEN JAW WRENCHES 3 Each

6J SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$.

6J SERIES Unified and American Sizes: $\frac{3}{16}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{1}{16}"$, $\frac{1}{16}" \times \frac{3}{4}"$ Across
Flats.

6JM SERIES Metric Sizes: 8 $\times$ 9, 10 $\times$ 11, 12 $\times$ 13, 14 $\times$ 15, 16 $\times$ 17, 18 $\times$ 19 mm.

5J SERIES B.A. Sizes: 4 $\times$ 2.

5J SERIES Unified and American Sizes: $\frac{1}{4}" \times \frac{5}{16}"$ Across Flats.

SOCKET WRENCHES 2 Each

AB SERIES Whitworth Sizes: $\frac{1}{8}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$.

B.A. Size: 2BA.

AB SERIES Unified and American Sizes: $\frac{3}{16}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{1}{16}"$, $\frac{3}{4}"$ Across Flats.

AHM/ABM SERIES Metric Sizes: 7-8-9-10-11-12-13-14-15-17-19 mm.

14 mm. Spark Plug Socket (ADH812).

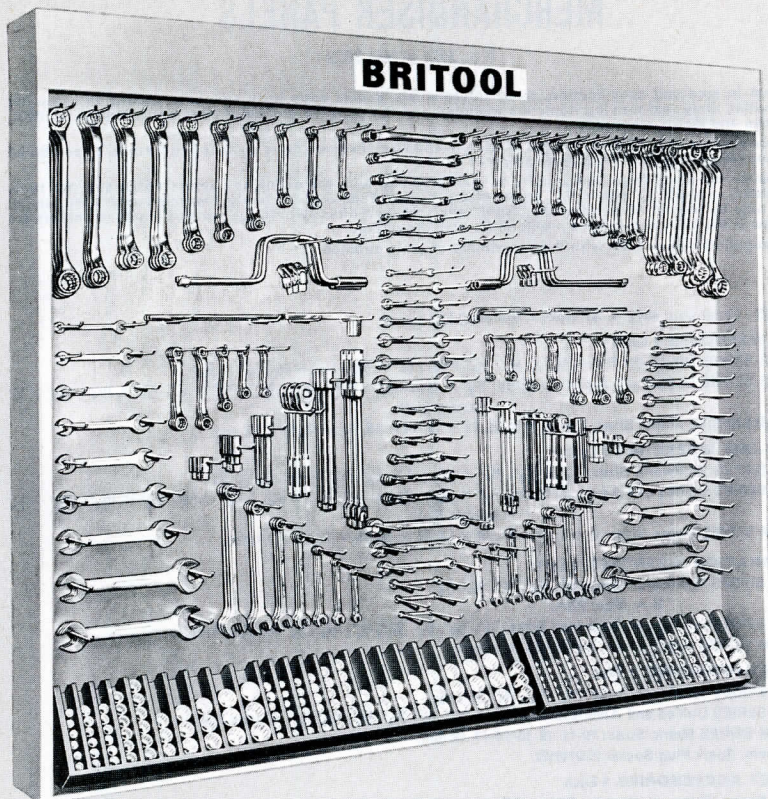
SOCKET ACCESSORIES 2 Each

$\frac{3}{8}"$ Square Drive—Spinner Handle, Bar Handle, "L" Handle,
Ratchet Handle, Swivel Handle, Flexible Extension,
3", 6" and 12" Extensions, Universal Joint

Weight 45 lb. complete.

20412 g.





MERCHANDISER CABINET No. 3020

This attractive, compact unit is a natural Impulse Sales Maker.

It contains comprehensive popular ranges of ring, open jaw, combination and socket wrenches covering British, American and Metric sizes, together with socket accessories.

The cabinet is sturdily constructed and the hinged pelmet incorporates a translucent plastic sign silk-screened 'BRITool'.

Wrenches and accessories are located on rigid, bright plated hooks which will accommodate increased quantities. The sockets are contained in full-depth wooden trays with separate slots for each size.

A 240 volt fitting, which will accept any standard 4 ft. bi-pin fluorescent tube supplied by the customer, is fixed at the top of the cabinet.

Complete with assembly instructions, fixing battens, screws, Rawlplugs, angle brackets and self-adhesive size/part number labels.

Finish: Inside—Red Cellulose.

Outside—Light Grey Cellulose.

Cabinet supplied free on loan with assortment of tools detailed.

MERCHANDISER CABINET No. 3020

Cabinet 72" × 60" × 8" (1829 × 1524 × 203 mm.) complete with the following wrenches, sockets and accessories:—

RING WRENCHES 3 Each

2RB SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{9}{16}"$, $\frac{9}{16}" \times \frac{5}{8}"$, $\frac{5}{8}" \times \frac{3}{4}"$.

4200 SERIES Whitworth Size: $\frac{11}{16}" \times \frac{3}{4}"$.

2RB SERIES Unified and American Sizes: $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{9}{16}"$, $\frac{9}{16}" \times \frac{5}{8}"$, $\frac{5}{8}" \times \frac{3}{4}"$, $\frac{11}{16}" \times \frac{3}{4}"$, $\frac{3}{4}" \times \frac{7}{8}"$, $\frac{7}{8}" \times \frac{15}{16}"$, $\frac{15}{16}" \times 1"$ Across Flats.

4200 SERIES Unified and American Sizes: $1" \times 1\frac{1}{16}"$, $1\frac{1}{16}" \times 1\frac{1}{4}"$ Across Flats.

9RBM SERIES Metric Sizes: 6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

6RB SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$.

6RB SERIES Unified and American Sizes: $\frac{3}{16}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{9}{16}"$, $\frac{9}{16}" \times \frac{5}{8}"$, $\frac{5}{8}" \times \frac{3}{4}"$, $\frac{3}{4}" \times \frac{7}{8}"$, $\frac{7}{8}" \times \frac{15}{16}"$, $\frac{15}{16}" \times 1"$ Across Flats.

6RBM SERIES Metric Sizes: 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

RH SERIES B.A. Sizes: 4 × 3, 2 × 1.

OPEN JAW WRENCHES 3 Each

2J SERIES Whitworth Sizes: $\frac{1}{8}" \times \frac{3}{16}"$, $\frac{3}{16}" \times \frac{1}{4}"$, $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{9}{16}"$, $\frac{9}{16}" \times \frac{5}{8}"$, $\frac{5}{8}" \times \frac{3}{4}"$.

2J SERIES Unified and American Sizes: $\frac{1}{4}" \times \frac{5}{16}"$, $\frac{5}{16}" \times \frac{3}{8}"$, $\frac{3}{8}" \times \frac{7}{16}"$, $\frac{7}{16}" \times \frac{1}{2}"$, $\frac{1}{2}" \times \frac{9}{16}"$, $\frac{9}{16}" \times \frac{5}{8}"$, $\frac{5}{8}" \times \frac{3}{4}"$, $\frac{3}{4}" \times \frac{7}{8}"$, $\frac{7}{8}" \times \frac{15}{16}"$, $\frac{15}{16}" \times 1"$, $1\frac{1}{16}" \times 1\frac{1}{4}"$, $1\frac{1}{8}" \times 1\frac{3}{8}"$ Across Flats.

2JM SERIES Metric Sizes: 6 × 7, 8 × 9, 10 × 11, 12 × 13, 14 × 15, 16 × 17, 18 × 19 mm.

5J SERIES B.A. Sizes: 4 × 2, 3 × 1.

COMBINATION WRENCHES 3 Each

RJ Series Whitworth Sizes: $\frac{1}{8}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$, $\frac{1}{2}"$.

RJ SERIES Unified and American Sizes: $\frac{3}{16}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{9}{16}"$, $\frac{5}{8}"$, $1\frac{1}{16}"$, $\frac{3}{4}"$ Across Flats.

RJM SERIES Metric Sizes: 6, 8, 10, 14, 17, 19 mm.

SOCKET WRENCHES

AB SERIES 6 Each Whitworth Sizes: $\frac{1}{8}"$, $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$.

6 Each B.A. Size: 2BA.

AB SERIES 6 Each—Unified and American Sizes: $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{9}{16}"$, $\frac{5}{8}"$, $1\frac{1}{16}"$, $\frac{3}{4}"$, $1\frac{1}{8}"$ Across Flats.

EB SERIES 6 Each—Whitworth Sizes: $\frac{3}{16}"$, $\frac{1}{4}"$, $\frac{5}{16}"$, $\frac{3}{8}"$, $\frac{7}{16}"$, $\frac{1}{2}"$.

EB SERIES 3 Each—Whitworth Sizes: $\frac{9}{16}"$, $\frac{5}{8}"$, $1\frac{1}{16}"$, $\frac{3}{4}"$.

EB SERIES 6 Each—Unified and American Sizes: $\frac{7}{16}"$, $\frac{1}{2}"$, $\frac{9}{16}"$, $\frac{5}{8}"$, $1\frac{1}{16}"$, $\frac{3}{4}"$ Across Flats.

EB SERIES 3 Each—Unified and American Sizes: $1\frac{1}{16}"$, $\frac{3}{4}"$, $\frac{7}{8}"$, $1\frac{1}{8}"$, $1"$, $1\frac{1}{16}"$, $1\frac{1}{8}"$, $1\frac{1}{4}"$ Across Flats.

14mm. Spark Plug Sockets 3 each—ADH812, EDH812.

SOCKET ACCESSORIES 3 Each

$\frac{3}{8}"$ Square Drive—Speed Brace, Bar Handle, "L" Handle, Short "T" Adaptor, Ratchet Wrench, Sliding Offset Handle, Swivel Handle, Universal Joint, 3", 6" and 12" Extensions.

$\frac{1}{2}"$ Square Drive—Speed Brace, Bar Handle, "L" Handle, Short "T" Adaptor, Ratchet Wrench, Swivel Handle (15"), Universal Joint, 3", 6" and 12" Extensions.

Total—582 pieces. Weight 280 lb. complete. (Cabinet and Tools).
127010 g.

METRIC SOCKET ATTACHMENTS (OPTIONAL EXTRAS)

These are generally similar to the socket trays incorporated in the cabinet and may be fitted underneath it or made into free standing units by appropriate use of the side supports provided. Red cellulose finish.

No. 3020/A $\frac{3}{8}"$ Square Drive. Size: $15\frac{1}{2}" \times 6\frac{3}{4}" \times 1\frac{1}{16}"$ (394 × 171 × 33 mm.).
contains 75— $\frac{3}{8}"$ square drive bihexagon sockets, AHM/ABM series.
5 each—7-8-9-10-11-12-13-14-15-16-17-18-19-20-21 mm.

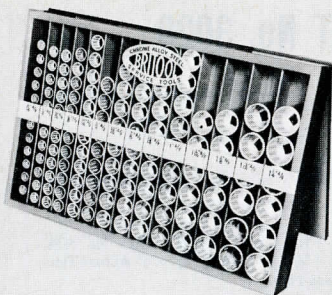
Weight 10 lb. complete.
4536 g.

No. 3020/E $\frac{1}{2}"$ Square Drive. Size $27" \times 9\frac{1}{2}" \times 2"$ (686 × 241 × 51 mm.).
contains 110— $\frac{1}{2}"$ square drive bihexagon sockets, EBM series.
5 each—10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm.

Weight 33 lb. complete.
14969 g.

Full assembly and fitting instructions supplied.

SOCKET MERCHANDISERS



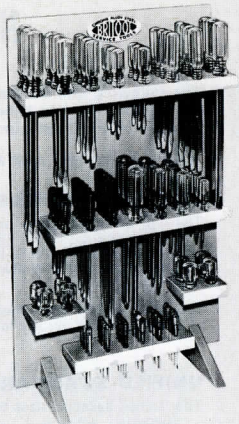
These socket merchandisers have been created to make increased sales of BRITool sockets and facilitate the stocking problem of Tool Dealers and Motor Factors.

The merchandiser boxes are entirely free of charge when bought with the small stock of sockets detailed.

- No. 2785** contains 129— $\frac{3}{8}$ " square drive bihexagon sockets, AB series.
 12 each— $\frac{1}{8}$ " W, $\frac{3}{16}$ " W, $\frac{3}{16}$ " A/F, $\frac{3}{16}$ " A/F, $\frac{3}{16}$ " A/F.
 9 each— $\frac{1}{8}$ " W, $\frac{3}{16}$ " W, $\frac{1}{2}$ " A/F, $\frac{9}{16}$ " A/F, $\frac{5}{8}$ " A/F.
 6 each— $\frac{3}{8}$ " W, $\frac{7}{16}$ " W, $\frac{1}{2}$ " A/F, $\frac{3}{4}$ " A/F.
 Box dimensions: $14" \times 9\frac{1}{2}" \times 1\frac{1}{2}"$ (356 $\times$ 241 $\times$ 38 mm.).
 Lid acts as back support.
 Weight **11 lb. 8 oz.** complete.
5217 g.
- No. 3020/A** contains 75— $\frac{3}{8}$ " square drive bihexagon sockets, AHM/ABM series.
 5 each—7-8-9-10-11-12-13-14-15-16-17-18-19-20-21 mm.
 Box dimensions: $15\frac{1}{2}" \times 6\frac{3}{4}" \times 1\frac{1}{16}"$ (394 $\times$ 171 $\times$ 33 mm.).
 Mounted on reversible side supports.
 Weight **10 lb.** complete.
4536 g.
- No. 2770** contains 93— $\frac{1}{2}$ " square drive bihexagon sockets, EB series.
 12 each— $\frac{3}{16}$ ", $\frac{1}{4}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ " Whitworth.
 9 each— $\frac{7}{16}$ ", $\frac{1}{2}$ ", $\frac{9}{16}$ " Whitworth.
 6 each— $\frac{5}{8}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ " Whitworth.
 Box dimensions: $14\frac{1}{2}" \times 13" \times 2\frac{1}{4}"$ (368 $\times$ 330 $\times$ 57 mm.).
 Lid acts as back support.
 Weight **29 lb.** complete.
13154 g.
- No. 2771** contains 129— $\frac{1}{2}$ " square drive bihexagon sockets, EB series.
 12 each— $\frac{7}{16}$ ", $\frac{1}{2}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " Across Flats.
 9 each— $\frac{3}{4}$ ", $\frac{13}{16}$ ", $\frac{7}{8}$ ", $\frac{15}{16}$ ", 1" Across Flats.
 6 each— $\frac{1}{2}$ ", $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " Across Flats.
 Box dimensions: $20" \times 13" \times 2\frac{1}{4}"$ (508 $\times$ 330 $\times$ 57 mm.).
 Lid acts as back support.
 Weight **38 lb.** complete.
17237 g.
- No. 3020/E** contains 110— $\frac{1}{2}$ " square drive bihexagon sockets, EBM series.
 5 each—10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-32 mm.
 Box dimensions: $27" \times 9\frac{1}{2}" \times 2"$ (686 $\times$ 241 $\times$ 51 mm.).
 Mounted on reversible side supports.
 Weight **33 lb.** complete.
14969 g.
- No. 2792** contains 36— $\frac{3}{4}$ " square drive bihexagon sockets, HB series.
 3 each— $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{16}$ ", $\frac{5}{16}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ ", $\frac{13}{16}$ ", $\frac{7}{8}$ ", $\frac{15}{16}$ ", 1", $\frac{1}{8}$ ", $\frac{1}{4}$ " Whitworth.
 Box dimensions: $29\frac{1}{4}" \times 9\frac{1}{2}" \times 3\frac{3}{8}"$ (743 $\times$ 241 $\times$ 86 mm.).
 Supported by wooden wedges.
 Weight **47 lb.** complete.
21319 g.
- No. 2793** contains 54— $\frac{3}{4}$ " square drive bihexagon sockets, HB series.
 3 each— $\frac{7}{16}$ ", $\frac{15}{16}$ ", 1", $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ ", $\frac{13}{16}$ ", $\frac{7}{8}$ ", $\frac{15}{16}$ ", 1", $\frac{1}{8}$ ", $\frac{1}{4}$ " Whitworth.
 Box dimensions: $39\frac{3}{4}" \times 9\frac{1}{2}" \times 3\frac{3}{8}"$ (1010 $\times$ 235 $\times$ 86 mm.).
 Supported by wooden wedges.
 Weight **74 lb.** complete.
33566 g.
- No. 2794** contains 39— $\frac{3}{4}$ " square drive bihexagon sockets, HBM series.
 3 each—22-24-26-27-29-30-32-35-36-38-41-46-50 mm.
 Box dimensions: $29\frac{1}{4}" \times 9\frac{1}{2}" \times 3\frac{3}{8}"$ (743 $\times$ 241 $\times$ 86 mm.).
 Supported by wooden wedges.
 Weight **48 lb.** complete.
21733 g.

SCREWDRIVER MERCHANDISER

- Constructed throughout from $\frac{3}{4}$ " thick plywood.
- Supported by two detachable triangular feet.
- Suitable for counter, shelf or wall display.
- Red cellulose finish.
- Panel free with assortment detailed.



No. 2789 Size 30" x 18" (762 x 457 mm.).

Contains 90 Screwdrivers in the following patterns and quantities:—

ENGINEER'S PATTERN	No. 417 SERIES ROUND BLADE 6 each 4" Blade. 4 each 6" Blade. 3 each 8" and 12" Blade.
ENGINEER'S PATTERN	No. 422 SERIES SQUARE BLADE 4 each 6" and 8" Blade. 3 each 12" Blade.
ELECTRICIAN'S PATTERN	No. 415 SERIES ROUND BLADE 5 each 4", 6" and 8" Blade.
PHILLIPS PATTERN	No. 423 SERIES 5 each 3" x No. 1 Point. 4 each 4" x No. 2 and 6" x No. 3 Point. 3 each 8" x No. 4 Point.
CHUBBY PATTERN	4 each Engineer's $1\frac{1}{2}$ " (No. 419). 2 each Phillips 1" x No. 1 and $1\frac{1}{2}$ " x No. 2. (No. 424 Series).
POCKET PATTERN	24 each $2\frac{1}{2}$ " (No. 421).

Weight 30 lb. complete.
13608 g.

ADJUSTABLE WRENCH MERCHANDISERS

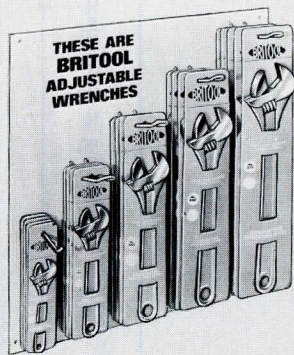
Made from $\frac{3}{16}$ " hardboard with folding back support.

Wrenches located on bright plated "quick-fitting" hooks.

Attractive yellow and black finish.

Suitable for counter, shelf or wall display.

Panels supplied free of charge with assortment detailed.



No. 3023

Size 15" x 15" (381 x 381 mm.)

Contains 25 adjustable wrenches CHROME PLATED FINISH
5 each—4", 6", 8", 10", 12" overall length.

Weight 17 lb. complete.
7711 g.

No. 3024

Size 15" x 15" (381 x 381 mm.)

Contains 25 adjustable wrenches PHOSPHATED FINISH
5 each—4", 6", 8", 10", 12" overall length.

Weight 17 lb. complete.
7711 g.



NUT AND BOLT HEAD SIZES

The following information is given to assist in the correct interpretation of the bolt diameters and their appropriate hexagon head and nut sizes which are the basis of all the tables (excepting the Metric) throughout this Catalogue.

WHEN IN DOUBT ALWAYS QUOTE THE ACTUAL ACROSS FLATS DIMENSION.

BRITISH STANDARD SIZES

The bolt diameters given under a "WHITWORTH" heading refer to the original B.S.W. B.S. 190 for bolts and nuts. The bolt diameters given under a "B.S." heading refer to the current British Standards B.S. 1083 and 916 which, compared with B.S. 190, have smaller hexagon head and nut dimensions for the same size Whitworth bolt. The specifications for Whitworth bolts and nuts according to B.S. 1083 and 916 are identical with B.S.F. which has not been altered.

A typical example would therefore show:—

Hexagon .820" across flats = $\frac{7}{16}$ " Whitworth (B.S. 190) or
 $\frac{1}{2}$ " Whitworth (B.S.) and $\frac{1}{2}$ " B.S.F. (B.S. 1083 and 916).

UNIFIED STANDARD SIZES

The Unified hexagon sizes for bolts and nuts given in the tables are covered by the following British Standards:—

NORMAL SERIES — B.S. 1768 for Precision Bolts, Screws and Nuts.
 B.S. 2708 for Black Bolts, Screws and Nuts.

HEAVY SERIES — B.S. 1769 for Black Bolts, Screws and Nuts.

MACHINE SCREWS — B.S. 1981 for Machine Screws and Nuts.
 In the tables, Machine Screws are signified "M" and Machine Nuts signified "MP" (precision), "Mp" (pressed).

Many of the Unified hexagon sizes are interchangeable with American S.A.E. and U.S.S. as shown in the tables.

Attention is drawn to the fact that the nuts for $\frac{7}{16}$ " and $\frac{1}{2}$ " diameter Normal Series bolts have different across flat dimensions to the bolt head.

This is clearly shown in the abridged table below which will facilitate the selection of appropriate wrench size for use on this range.

UNIFIED HEXAGON RANGE				
Wrench Size Across Flats in.	Suitable for use on			
	Bolt dia. Nominal in.	Series	Nut size Nominal in.	Series
$\frac{1}{16}$	$\frac{1}{16}$	Normal	$\frac{1}{16}$	Normal
$\frac{1}{8}$	$\frac{3}{16}$	Normal	$\frac{5}{16}$	Normal
$\frac{9}{16}$	$\frac{3}{8}$	Normal	$\frac{3}{8}$	Normal
$\frac{5}{8}$	$\frac{7}{16}$	Normal	—	—
$\frac{11}{16}$	—	—	$\frac{7}{16}$	Normal
$\frac{3}{4}$	$\frac{1}{2}$	Normal	$\frac{1}{2}$	Normal
$\frac{13}{16}$	$\frac{7}{16}$	Normal	—	—
$\frac{7}{8}$	$\frac{1}{2}$	Heavy	$\frac{1}{2}$	Heavy
$\frac{15}{16}$	$\frac{5}{8}$	Normal	$\frac{5}{8}$	Normal
$1\frac{1}{16}$	$\frac{5}{8}$	Heavy	$\frac{5}{8}$	Heavy
$1\frac{1}{8}$	$\frac{3}{4}$	Normal	$\frac{3}{4}$	Normal
$1\frac{1}{4}$	$\frac{3}{4}$	Heavy	$\frac{3}{4}$	Heavy
$1\frac{3}{8}$	$\frac{7}{8}$	Normal	$\frac{7}{8}$	Normal
$1\frac{7}{8}$	$\frac{7}{8}$	Heavy	$\frac{7}{8}$	Heavy
$1\frac{1}{2}$	1	Normal	1	Normal
$1\frac{5}{8}$	1	Heavy	1	Heavy
$1\frac{11}{16}$	$1\frac{1}{8}$	Normal	$1\frac{1}{8}$	Normal
$1\frac{13}{16}$	$1\frac{1}{8}$	Heavy	$1\frac{1}{8}$	Heavy
$1\frac{7}{8}$	$1\frac{1}{4}$	Normal	$1\frac{1}{4}$	Normal
2	$1\frac{1}{4}$	Heavy	$1\frac{1}{4}$	Heavy
$2\frac{1}{16}$	$1\frac{3}{8}$	Normal	$1\frac{3}{8}$	Normal
$2\frac{1}{8}$	$1\frac{3}{8}$	Heavy	$1\frac{3}{8}$	Heavy
$2\frac{1}{4}$	$1\frac{1}{2}$	Normal	$1\frac{1}{2}$	Normal
$2\frac{3}{8}$	$1\frac{1}{2}$	Heavy	$1\frac{1}{2}$	Heavy
$2\frac{5}{8}$	—	—	$1\frac{5}{8}$	Heavy
$2\frac{3}{4}$	$1\frac{3}{4}$	Normal	$1\frac{3}{4}$	Normal
$2\frac{7}{8}$	$1\frac{3}{4}$	Heavy	$1\frac{3}{4}$	Heavy
$2\frac{15}{16}$	—	—	$1\frac{7}{8}$	Heavy
3	2	Normal	2	Normal
$3\frac{1}{8}$	2	Heavy	2	Heavy

A condensed WRENCH COMPARATOR CHART covering the British, American and Continental Standards in common use will be found on pages 88-91

A more comprehensive WRENCH CHART covering the majority of current standards is available from BRITTOOL WORKS on application.

ISO METRIC HEXAGON SIZES

AS GIVEN IN BS 3692:1967 AND BS 4190:1967

The table below gives details of ISO metric bolt diameters and respective metric spanner sizes which fall within the range of this catalogue.

Also shown is a guide to the selection of ISO metric bolts which are suggested as replacements or alternatives to existing inch sizes.

The ISO metric bolt diameters shown in brackets, e.g. (14), are non-preferred sizes.

ISO METRIC BOLT AND NUT SIZES			EXISTING INCH BOLT AND NUT SIZES					
Nominal Bolt Diameter		Nominal Spanner Size A/F	Suggested Bolt Size to be Replaced by ISO Metric	Nominal Spanner Size Across Flats in.				
				UNIFIED (NUT)		WHIT. B.S. 190	B.S. B.S. 1083	B A.
mm.	in.	mm.		Normal	Heavy			
1.6	.063	3.2	{ 11B.A. 10B.A.	—	—	—	—	-103
2	.079	4	9B.A.	—	—	—	—	-117
2.5	.098	5	7B.A.	—	—	—	—	-131
			5B.A.	—	—	—	—	-172
3	.118	5.5	{ No. 4 1/8"	3/16	—	—	—	-220
			3B.A.	—	—	.338	—	—
4	.157	7	{ No. 8 2B.A.	5/16	—	—	—	-282
			No. 10	3/8	—	—	—	—
5	.197	8	{ 3/16" 0B.A.	—	—	.445	—	-324
			1/4"	—	—	—	—	-413
6	.236	10	{ 1/4" 1/4"	3/16	—	.525	.445	—
(7)	.276	11	3/16"	1/2	—	.525	.445	—
8	.315	13	3/8"	9/16	—	.600	.525	—
10	.394	17	{ 7/16" 1/2"	1 1/16	—	.710	.600	—
			3/4	7/8	—	.820	.710	—
12	.472	19	{ 3/4" 7/8"	1 1/8	—	.920	.820	—
(14)	.551	22	1 1/8"	1 1/2	—	1.010	.920	—
16	.630	24	1 1/2"	1 3/4	—	1.100	1.010	—
(18)	.709	27	1 3/4"	2	—	1.200	1.100	—
20	.789	30	2"	2 1/8	1 1/4	1.300	1.200	—
(22)	.866	32	2 1/8"	2 1/4	1 3/8	1.480	1.300	—
24	.945	36	2 1/4"	2 3/8	1 1/2	1.670	1.480	—
(27)	1.063	41	2 3/8"	2 1/2	1 5/8	1.670	1.480	—
30	1.181	46	2 1/2"	2 3/4	1 3/4	1.860	1.670	—
(33)	1.299	50	2 3/4"	3	2	2.050	1.860	—
36	1.417	55	{ 2 3/4" 2 1/2"	3 1/8	2 1/4	2.050	1.860	—
			2 1/2"	3 1/4	2 1/2	2.220	2.050	—
(39)	1.535	60	2 1/2"	3 1/2	2 3/4	2.410	2.220	—
42	1.653	65	2 3/4"	3 3/8	2 3/4	2.410	2.220	—
(45)	1.772	70	2 3/4"	3 1/2	2 3/4	2.760	2.580	—
48	1.890	75	{ 2 3/4" 2"	3 3/4	2 3/4	2.760	2.580	—
			2"	3 1/2	2 3/4	3.150	2.760	—
(52)	2.047	80	2"	3 1/2	2 3/4	3.150	2.760	—

WRENCH COMPARATOR CHART

FOR HEXAGONAL NUTS & BOLTS

The bolt diameter assigned to a particular across flats size can vary according to the Standard which is being used.

This chart shows, at a glance, where more than one Standard is applicable.

UNIFIED	BRITISH	AMERICAN	METRIC
1. Bolt Dia. Nominal Series. 3. Nut Size Nominal. 4. Series. Abbreviations: N. Normal. H. Heavy. MP. Machine Nut Precision. Mp. Machine Nut Pressed. M. Machine Screw.	5. Original Whitworth B.S. 28 and 190. 6. Current Whitworth and B.S.F. B.S. 1083. 7. B.A. B.S. 57. 8. Black Bolts and Nuts. B.S. 916.	9. Regular Series. Bolts Unfinished, Semi-finished, Finished. 10. Regular Series. Nuts. Jam Nuts. Slotted Nuts. Unfinished, Semi-finished, Finished. 11. U.S.S. National Coarse Nuts and Bolts. Heavy Series, Bolts and Nuts. 12. S.A.E. National Fine, Screws, Bolts and Nuts. Light Series, Nuts.	13. German, DIN130. 14. French, Système Français. 15. French, Système Internationale. 16. French, Type standard. 17. I.S.O. Specifications. B.S. 3692:1963. B.S. 4190:1967.

Nom. Wrench Opening Nut & Bolt Head Size Across Flats			NOMINAL BOLT DIAMETERS UNLESS OTHERWISE STATED																
Dec. Size in.	Frac. Size in.	Size mm.	UNIFIED STANDARD				BRITISH STANDARD				AMERICAN STANDARD				METRIC STANDARD				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
103									11										
117									10										
126		3.2																1.6	
131									9										
152									8										
157		4													1.7		2.5		2
172									7										
187	3/16		No. 4	M	No. 4	MP													
193									6										
196		5													2.3		3		2.5
217		5.5																	3
220									5										
236		6													3	3	3.5		
248									4										
250	1/4		No. 6 No. 8	M	No. 4 No. 6	Mp MP													
275		7													3.5	4	4	4	4
282									3										
312	3/16		No. 10	M	No. 6 No. 8	Mp MP													
315		8													4		5	5	5

WRENCH COMPARATOR CHART

Nom. Wrench Opening Nut & Bolt Head Size Across Flats			NOMINAL BOLT DIAMETERS UNLESS OTHERWISE STATED																
Dec. Size in.	Frac. Size in.	Size mm.	UNIFIED STANDARD				BRITISH STANDARD				AMERICAN STANDARD				METRIC STANDARD				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
324									2										
338							1/8												
343	11/32				{ No. 8 Mp No. 10 MP														
354		9													4-5/5	5			
365									1										
375	3/8				No. 10	Mp					1/4								
393		10													5-5	6		6	6
413								3/32	0										
433		11													6/7				7
437	7/16		1/4	N	1/4	Mp & N						1/4		1/4					
445							3/16	1/4		1/4									
472		12														7	6	7	
500	1/2		3/16	N	5/16	N					3/16		1/4	3/16					
512		13																	8
525							1/4	3/16		3/16									
551		14													8	8			
562	3/16		3/8	N	{ 5/16 Mp 3/8 N						3/8	3/16		3/8					
590		15															8	8	
593	11/32												3/16						
600							3/16	3/8		3/8									
625	5/8		3/16	N	3/8	Mp					3/16	3/8		3/16					
629		16														9	9	9	
669		17													9/10	10		10	10
687	11/16				3/8	N							3/8						
708		18															10		
710							3/8	3/16		3/16									
748		19													11	11	11	11	12
750	3/4		1/2	N	1/2	N					1/2	3/16		1/2					
781	25/32												3/16						
812	13/16		3/16	N								1/2							
820							3/16	1/2		1/2									
826		21														12	12	12	
866		22													12/14				14
875	3/4		1/2	H	{ 1 1/2 3/4 H						3/16	3/16	1/2	3/16					

WRENCH COMPARATOR CHART

Nom. Wrench Opening Nut & Bolt Head Size Across Flats			NOMINAL BOLT DIAMETERS UNLESS OTHERWISE STATED																
Dec. Size in.	Frac. Size in.	Size mm.	UNIFIED STANDARD				BRITISH STANDARD				AMERICAN STANDARD				METRIC STANDARD				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
905		23														13	14	14	
920							1/2	5/16		3/16									
937	15/16		5/8	N	5/8	N					5/8		5/16 Hvy	5/8			14		16
944		24																	
968	3/32												3/16 U.S.S.						
1-000	1											5/8		11/16 S.A.E.					
010							3/16	5/8		5/8							15	16	16
023		26															16		
062	1 1/16	27	5/8	H	5/8	H							5/8	3/4	16				18
100							5/8	1 1/16											
102		28														16			
125	1 1/8		3/4	N	3/4	N					3/4	3/4							
141		29															18	18	
181		30																	20
200							1 1/16	3/4		3/4									
220		31														18			
250	1 1/4		3/4	H	3/4	H							3/4	7/8					
259		32													18/20		20	20	22
300							3/4	7/8		7/8									
312	1 5/16		7/8	N	7/8	N					7/8	7/8							
378		35															22	22	
390							1 3/16	1 5/16											
417		36													22/24				24
437	1 7/16		7/8	H	7/8	H							7/8	1					
480							7/8	1		1									
496		38														22	24/25	24	
500	1 1/2		1	N	1	N					1	1							
574		40					1 5/16										23	26	
614		41													27				27
625	1 5/8		1	H	1	H							1	1 1/8					
653		42														24	27	27	
670							1	1 1/8		1 1/8									
687	1 11/16		1 1/8	N	1 1/8	N					1 1/8	1 1/8							
692		43														25	28		
771		45														26			
811		46													30	27	30	30	30

WRENCH COMPARATOR CHART

Nom. Wrench Opening Nut & Bolt Head Size Across Flats			NOMINAL BOLT DIAMETERS UNLESS OTHERWISE STATED																
Dec. Size in.	Frac. Size in.	Size mm.	UNIFIED STANDARD				BRITISH STANDARD				AMERICAN STANDARD				METRIC STANDARD				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
812	1 13/16		1 1/8	H	1 1/8	H							1 1/8	1 1/4					
860							1 1/8	1 1/4		1 1/4									
875	1 1/8		1 1/4	N	1 1/4	N					1 1/4	1 1/4							
929		49														28	32		
968		50													33		33	33	33
2-000	2		1 1/4	H	1 1/4	H							1 1/4	1 3/8					
047		52														30	34/35		
050							1 1/4	1 3/8		1 3/8									
062	2 1/16		1 3/8	N	1 3/8	N					1 3/8	1 3/8							
126		54															36	36	
165		55													36				36
187	2 3/16		1 3/8	H	1 3/8	H							1 3/8	1 1/2					
204		56														32			
220							1 3/8	1 1/2		1 1/2									
244		57														33	38		
250	2 1/4		1 1/2	N	1 1/2	N					1 1/2	1 1/2							
283		58														34	39	39	
362		60													39	35	40		39
375	2 3/8		1 1/2	H	1 1/2	H							1 1/2						
410							1 1/2	1 5/8		1 5/8									
437	2 7/16										1 5/8	1 5/8							
440		62														36			
480		63															42	42	
559		65													42				42
562	2 3/8				1 5/8	H							1 5/8						
580							1 5/8	1 3/4		1 3/4									
625	2 5/8		1 3/4	N	1 3/4	N					1 3/4	1 3/4							
750	2 3/4		1 3/4	H	1 3/4	H							1 3/4						
755		70														45			45
760							1 3/4	2		2									
812	2 13/16										1 7/8	1 7/8							
937	2 15/16				1 7/8	H							1 7/8						
953		75																	48
3-000	3		2	N	2	N					2	2							
125	3 1/8		2	H	2	H							2						
149		80													52				52
150							2	2 1/4		2 1/4									

ADDITIONS

The following items have been added to the Britool range since the No. 107 Catalogue was published.

No.	Page No. This Catalogue	No.	Page No. This Catalogue	No.	Page No. This Catalogue
A31/1PZD	28	2RBM3032	39	306	77
A31/2PZD	28	2RBM3236	39	306C	77
A31/3PZD	28	2RBM3641	39	308	77
A32/4PZD	28	2RBM4146	39	308C	77
A45	11	6RBM78	37	310	77
ADH812	9	6RBM810	37	310C	77
*AVT100	55	6RBM1113	37	312	77
*AVT300	55	6RBM1317	37	312C	77
E31/1PZD	28	9RBM1113	39	315	77
E31/2PZD	28	RHM45	42	318	77
E31/3PZD	28	RHM555	42	*391/3	53
E32/4PZD	28	RK/A45	78	425/1	72
EDH812	16	*RK/A74	78	425/2	72
*EVT600	55	*RK/D74	78	425/3	72
*EVT1200	55	*RK/E73	78	425/4	72
*EVT2000	55	*RK/E74	78	426/1	72
*EVT3000	55	RK/H73	78	426/2	72
G74	26	RK/H74	78	*447D	34
*GVT8400	55	RK/304	77	556	78
H74	23	RK/304C	77	2410 Set	42
*HVT5000	55	RK/306	77	2411 Set	42
2JM1113	45	RK/306C	77	2421B Set	38
5JM324	43	RK/308	77	2429B Set	45
5JM45	43	RK/308C	77	2453B Set	38
5JM555	43	RK/310	77	2459B Set	38
5JM78	43	RK/310C	77	2467B Set	46
6JM78	47	RK/312	77	2489 Set	43
6JM810	47	RK/312C	77	2490 Set	12
6JM1113	47	RK/315	77	2498 Set	18
6JM1317	47	RK/318	77	2499 Set	37
6JM1719	47	*95B Set	19	2504 Set	49
6JM1922	47	*96C Set	19	2642B Set	49
6JM2224	47	*97B Set	19	2643B Set	84
6JM2427	47	*109B Set	18	2792	84
6JM2730	47	*110B Set	18	2793	84
6JM3032	47	*111B Set	18	2794	84
6JM3236	47	*112B Set	18	*3010A	79
6JM3641	47	*113B Set	18	*3011A	79
6JM4146	47	*140C Set	20	*3012A	79
6JM4650	47	*141B Set	20	*3013A	79
6JM5055	47	*143D Set	20	*3014A	79
6JM5560	47	144A Set	20	*3015A	79
PHHM20	67	*145C Set	21	3016	79
1PZD	28	146A Set	21	3020/A	83
2PZD	28	222	76	3020/E	83
3PZD	28	225	75	3023	85
4PZD	28	226	75	3024	85
2RB8187	39	304	77		
2RB8193	39	304C	77		
2RBM2730	39				

* See Modifications on page 94.

DELETIONS

The following items have been deleted from the Catalogue and are no longer available.

No.	Page No. No. 107 Catalogue	No.	Page No. No. 107 Catalogue	No.	Page No. No. 107 Catalogue
A31/1	20	*109A Set	31	2428R Set	73
A31/2	20	*110A Set	31	2440R Set	72
A31/3	20	*111A Set	31	2441R Set	72
A32/4	20	*112A Set	31	2442R Set	73
A44	19	*113A Set	31	2446R Set	72
A74/20T	19	*118 Set	15	2447R Set	73
*AVT100/R	87	*140B Set	35	2450B Set	62
AVT280/R	87	*141A Set	35	2450R Set	62
*AVT300/RR	—	*143C Set	35	2451R Set	62
D31/1	14	*145B Set	35	2452R Set	63
D31/2	14	150 Set	61	2454R Set	63
D31/3	14	190	105	2455R Set	63
E31/1	30	388 (all sizes)	84	2456R Set	62
E31/2	30	389F/2	81	2457B Set	63
E31/3	30	*391/2	81	2457R Set	63
E32/4	30	*447C	56	2458R Set	63
*EVT600/RR	87	546C	107	2488 Set	71
*EVT1200/RR	87	641	105	2497B Set	21
*EVT2000/RR	87	665	105	2507 Set	65
*EVT3000/RR	87	675	105	2631R Set	77
FTB18	106	683/4	103	2634R Set	77
FTB21	106	683/4H	103	2638R Set	77
FTB27	106	693	107	2773	115
FTB30	105	730	105	*3010	114
G77	43	841	106	*3011	114
*GVT8400/R	87	943	106	*3012	114
H77	39	1012	105	*3013	114
*HVT5000/RR	87	1026	104	*3014	114
5J2023	71	1354	79	*3015	114
5J2123	71	1357	79	4104	65
5J2629	71	1365	79	4107	65
PF98	98	1370	79	4111	65
PFH562	98	1374	79	4115	65
PFH820	98	1382	79	4124	65
PFHM21	98	2029	107	4200	67
PH65	99	2030	107	4201	66
2RBM67	67	2038	107	4202	67
2RBM89	67	2039	107	4203	67
2RBM1011	67	2400B Set	67	4204	66
2RBM1213	67	2400R Set	67	4205	67
2RBM1415	67	2401B Set	67	4207	66
2RBM1617	67	2401R Set	67	4209	67
2RBM1819	67	2402B Set	66	4210	66
2RBM2022	67	2402R Set	66	4211	67
2RBM2123	67	2403B Set	66	4212	67
2RBM2426	67	2403R Set	66	4213	67
RHM324	—	2413 Set	70	4214	67
*RK/A	109	2414 Set	70	4215	66
*RK/D	109	2415 Set	70	4216	67
*RK/E	109	2417B Set	67	4217	67
RK/H	109	2417R Set	67	4218	67
50A/77 Set	40	2418R Set	67	4219	67
51A/77 Set	40	2422R Set	63	4220	66
52A/77 Set	40	2423B Set	67	4221	67
53A/77 Set	40	2423R Set	67	4222	67
55A/77 Set	41	2424B Set	67	4223	66
56A/77 Set	41	2424R Set	67	4224	66
57A/77 Set	41	2425R Set	73	4225	67
58A/77 Set	40	2426R Set	73	4228	66
59B/77 Set	41	2427R Set	73		
*95A Set	32				
*96A Set	32				
*97A Set	32				

* See Modifications on page 94.

MODIFICATIONS

The specifications or part numbers for several items have now been modified. Details of these modifications are given below, together with the appropriate new part numbers.

OLD PART NO.	NEW PART No.	MODIFICATION TO SPECIFICATION
95A	95B	E56 deleted.
96A	96C	E56 deleted.
97A	97B	E56 deleted.
109A	109B	E74/40T deleted. E73 and E81 added.
110A	110B	E74/40T deleted. E73 and E81 added.
111A	111B	E74/40T deleted. E73 and E81 added.
112A	112B	E74/40T deleted. E73 and E81 added.
113A	113B	E74/40T deleted. E73 and E81 added.
140B	140C	A56 deleted. New metal case.
141A	141B	A56 deleted. New metal case.
143C	143D	A56 deleted. New metal case.
145B	145C	A56, ED1010 deleted.
391/2	391/3	1 $\frac{3}{16}$ " A/F socket arm deleted. $\frac{3}{4}$ " square drive arm added.
447C	447D	ED1010 deleted. Ring Wrench 27 $\times$ 32 mm. deleted. Open Jaw Wrench 32 $\times$ 35 mm. deleted. $\frac{3}{4}$ " square drive socket 32 mm. added. Ring Wrenches 5 $\times$ 5.5-6 $\times$ 7-27 $\times$ 30-32 $\times$ 36 mm. added. Open Jaw Wrenches 3,2 $\times$ 4-5 $\times$ 5.5-32 $\times$ 36 mm. added.
3010 to 3015 incl.	3010A to 3015A incl.	Wrench quantities altered from 6 off each to 5 off each.
RK/A	RK/A74	None.
RK/D	RK/D74	None.
RK/E	RK/E74	None.
AVT100/R	AVT100	None.
AVT300/RR	AVT300	None.
EVT600/RR	EVT600	None.
EVT1200/RR	EVT1200	None.
EVT2000/RR	EVT2000	None.
EVT3000/RR	EVT3000	None.
HVT5000/RR	HVT5000	None.
GVT8400/R	GVT8400	None.

WHEEL NUT SIZES

Make	Nut Size	Make	Nut Size
AUTOMOBILES			
ALFA ROMEO		FIAT	
All models	24mm. A/F	500 Sedan, 850 Saloon, 600 ..	17mm. A/F
		128, 124, 125, 1100, 1300, 1500 ..	19mm. A/F
		2300, 130	22mm. A/F
ASTON MARTIN		FORD	
DBS V8 Saloon	13/16" A/F	British models	3/4" A/F
		U.S.A. models	13/16" A/F
BENTLEY		HONDA	
T Series	13/16" A/F	N600, S800	17mm. A/F
BMW		JAGUAR	
All models	19mm. A/F	All models	3/4" A/F
BRISTOL		LANCIA	
411	7/16" W. 1/2" B.S.	All models	19mm. A/F
BRITISH LEYLAND		MERCEDES-BENZ	
Austin-Morris		All models except below ..	17mm. A/F
Mini Range, Morris Oxford/ Wolseley 16/60, Austin 3 Litre ..	3/4" A/F	600	19mm. A/F
Austin/Morris/Wolseley 1800 ..	7/8" A/F		
Austin/Morris/Wolseley 1100/ 1300 Range, MG/Princess 1100/ 1300 Range	3/4" A/F	MORGAN	
Austin Healey Sprite/MG Midget	13/16" A/F	4/4 models	1/2" W. 9/16" B.S.
MGB Tourer and GT	13/16" A/F	Plus 8	3/8" W. 7/16" B.S.
Standard Triumph		OLDSMOBILE	
Herald, Vitesse, 1500, Toledo, Spitfire IV, GT6	11/16" A/F	Cutlass	3/4" A/F
T2000, T2500 Mk II, Stag, TR6 ..	7/8" A/F	Toronado	13/16" A/F
BUICK		OPEL	
Skylark	3/4" A/F	All models	3/4" A/F
Other models	13/16" A/F		
CADILLAC		PEUGEOT	
.. .. .	13/16" A/F	203, 403, 404	19mm. A/F
		403 Station wagon	23mm. A/F
CHEVROLET		PONTIAC	
Impala, Monte-Carlo	3/4" A/F	Tempest, Firebird	3/4" A/F
		Other models	13/16" A/F
CHRYSLER UNITED KINGDOM		RELIANT	
Humber, Hillman, Sunbeam ..	3/4" A/F	TW4, TW7	3/4" A/F
		TW9, SE4, SE5	7/8" A/F
CITROEN		TW11	13/16" A/F
"A" Range, "D" Range ..	19mm. A/F	RENAULT	
DAIMLER		R.8, R.8.S, R.10, R.12, R.16, R.16TS	19mm. A/F
All models	3/4" A/F	R.4, R.6	17mm. A/F

Continued overleaf

WHEEL NUT SIZES (continued)

Make	Nut Size	Make	Nut Size
ROLLS ROYCE		DENNIS	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.
Silver Shadow, Phantom VI ..	$\frac{1}{16}$ " A/F	FODEN	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.
ROVER		FORD	
60, 75, 80, 90, 95, 100, 110, 3 Litre,	$\frac{3}{8}$ " W. $\frac{7}{8}$ " B.S.	British models	$1\frac{1}{2}$ " A/F
2000	$\frac{1}{2}$ " W. $\frac{7}{8}$ " B.S.		$\frac{1}{16}$ " A/F squ.
Land Rover	27mm. A/F		
Range Rover			
SAAB		TRACTORS	
All models	19mm. A/F	ALLIS CHALMERS	
TOYOTA		ED-40 Front	$\frac{1}{16}$ " A/F
All models	21mm. A/F	Rear	$1\frac{1}{8}$ " A/F
VAUXHALL		Gleaner Combine Model 'A' ..	$\frac{7}{8}$ " A/F Front
All models	$\frac{3}{4}$ " A/F		$\frac{3}{4}$ " Rear
VOLKSWAGEN		BTL-12D, 14D Loaders	$1\frac{1}{2}$ " A/F
All models	19mm. A/F	Gleander Combine Model 'C' ..	$\frac{1}{16}$ " A/F Front
VOLVO	$\frac{3}{4}$ " A/F		$\frac{3}{4}$ " A/F Rear
COMMERCIAL VEHICLES		12.PS Wheel Loader, 545 and	
A.E.C.	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.	645 Wheel Loader	$1\frac{1}{2}$ " A/F
ALBION	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.	DAVID BROWN	
BEDFORD		850, 880, 950, 990, 770, 780, 1200	$\frac{9}{16}$ " W. $\frac{5}{8}$ " B.S.
All trucks	$1\frac{1}{16}$ " A/F	Taskmaster Industrial Model	
Light Vans, CF Vans	$\frac{3}{4}$ " A/F	Front	$\frac{1}{2}$ " W. $\frac{7}{8}$ " B.S.
25/35 cwt. CF Van	$1\frac{1}{8}$ " A/F	Rear	$\frac{5}{8}$ " W. $\frac{1}{16}$ " B.S.
BRITISH LEYLAND		FORDSON	
Austin-Morris		Major Front	$\frac{3}{16}$ " W. $\frac{1}{2}$ " B.S.
J4 Van/Pick-up	$\frac{3}{4}$ " A/F	Rear	$1\frac{1}{2}$ " A/F
J11 Van Range	$\frac{3}{4}$ " A/F	Dexta, Super Dexta Front ..	$\frac{3}{16}$ " W. $\frac{1}{2}$ " B.S.
EA Van Range	$\frac{5}{8}$ " W. $\frac{1}{16}$ " B.S.	Rear	$1\frac{1}{8}$ " A/F
Guy	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.	INTERNATIONAL HARVESTER	
Leyland	$\frac{5}{8}$ " W. $\frac{1}{16}$ " B.S.	B275, B414, 434, 3434 Front ..	$\frac{1}{2}$ " W. $\frac{9}{16}$ " B.S.
	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.	Rear	$\frac{5}{8}$ " W. $\frac{1}{16}$ " B.S.
	$\frac{7}{8}$ " W. 1" B.S.	B450, B614 Rear	$1\frac{1}{2}$ " A/F
		H-25 Payloader	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.
CHRYSLER UNITED KINGDOM		MASSEY-FERGUSON	
Commer VC, CE	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.	65, 655, 65R, 203-7, 205-7, 35, 702	$1\frac{1}{8}$ " A/F
Commer KC	$\frac{5}{8}$ " W. $\frac{1}{16}$ " B.S.	MF-135, 165, 175, 1755, 178, 2203,	
Commer PB	$\frac{7}{16}$ " W. $\frac{1}{2}$ " B.S.	2205, 3303, 3305, 2135	$1\frac{1}{8}$ " A/F
Dodge—All models	$\frac{3}{4}$ " W. $\frac{7}{8}$ " B.S.	NUFFIELD	
		460, 342, Universal Four,	
		Universal Three	$1\frac{1}{8}$ " A/F



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